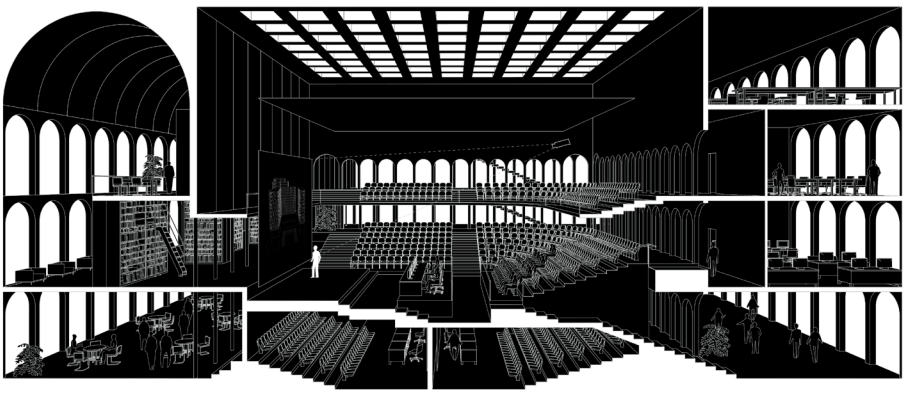
EMPOWER THE STUDENT

student evaluation on design studio courses



Thomas Laine

Aalto University
School of Arts, Design and Architecture
Master's Thesis
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Empower the Student

Student Evaluation on Design Studio Courses

Thomas Laine

Establishing conditions which facilitate dialogue, the examination of subjectivities, and the convergence of meaning by the empowering of student voice, ought to be primary in pedagogy.

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Abstract

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This thesis tested the proposition that the prevalent model of evaluating student performances on architectural design studio courses – which includes reviewing the students' works in an oral final review and providing one final grade – is needlessly vague and pedagogically unsubstantiated. One central argument was that this model enables an authoritative pedagogical model where teachers may unduly influence the students' artistic and professional growth and muffle critical thinking. Other argued issues with the model included unnecessary student stress, loss of confidence and self, ineffective studying and teaching, prolonged studies, and lesser professional abilities.

These criticisms of the model of evaluation are presented through a detailed account of the author's own thoughts and experiences as a student. The following methods were used to test the author's hypothesis: a literature review consisting of a look into the official guidelines on student evaluation and a reading of the subject discussion in the *Journal of Architectural Education* (*JAE*) throughout its history; a student survey involving 33 Finnish and 30 exchange architecture students at Aalto University; and two teacher interviews.

Results largely indicated support for the original hypothesis. Official Finnish guidelines on student evaluation provided no basis for the prevalent model of evaluation. Most articles in the JAE were critical with regards to the model of evaluation with particular emphasis being put on criticizing the final review or jury system. The student survey provided critical findings with the Finnish students' results indicating particular dissatisfaction with the specificity and verifiability of the evaluation. The two teacher interviews brought up the difficulty of providing the students with impartial evaluations considering that the course topics are often broad and students tend to approach their tasks differently.

Recommendations in the JAE included either terminating the practice of evaluating students in final reviews in favor of new practices or improving the overall model of evaluation by, for example, providing the students with written evaluations. This thesis concludes by elaborating on the idea of providing the students with written evaluations by demonstrating the use and functionalities of an evaluation form.

Key words: design studio, evaluation, architectural education, pedagogy, student learning

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Abstrakt

Författare: Thomas Laine
Titel: Empower the Student – Student Evaluation on Design Studio Courses
År: 2018
Sidor: 210
Språk: Engelska
Övervakare: Jenni Reuter, Professor i arkitekturens grunder och teori
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Denna avhandling testade påståendet att den allmänt använda modellen för att utvärdera studieprestationer på designstudiokurser inom arkitektur är onödigt vag och pedagogiskt obefogad. Modellen innebär att elevernas arbeten granskas i ett muntligt kritiktillfälle efter vilket ett slutvitsord ges. Ett centralt argument var att denna modell möjliggör en auktoritativ pedagogisk modell där lärare kan otillbörligt påverka elevernas konstnärliga och professionella tillväxt och dämpa kritiskt tänkande. Andra påstådda problem med modellen inkluderade onödig studentstress, förlust av självförtroende, ineffektivt studerande och lärande, förlängda studier och sämre professionella kunskaper.

Dessa kritiska påståenden presenteras genom en detaljerad redogörelse av författarens egna tankar och erfarenheter som studerande. Följande metoder användes för att testa författarens hypotes: en litteraturöversikt som består av en redogörelse av officiella riktlinjer för studentutvärdering och en läsning av ämnesdiskussionen i *Journal of Architectural Education* (*JAE*) genom tidningens hela historia; en undersökning med 33 finländska och 30 utbytesarkitekturstuderande från Aalto-universitetet; och två lärarintervjuer.

Resultaten stödde den ursprungliga hypotesen i en stor utsträckning. Officiella finska riktlinjer för studentutvärdering gav ingen grund för den allmänna utvärderingsmodellen. De flesta artiklarna i JAE var kritiska gentemot utvärderingsmodellen. Kritiktillfället eller jurysystemet fördömdes särskilt mycket. Studerandeundersökningen gav kritiska resultat. De finska studenternas resultat indikerar särskilt missnöje med utvärderingens specificitet och kontrollerbarhet. De två lärarintervjuerna lyfte fram svårigheten att ge eleverna opartiska utvärderingar med tanke på att studiokursernas ämnen ofta är breda och att eleverna tenderar att närma sig uppgifterna på olika sätt.

Rekommendationerna i JAE föreslog antingen att avsluta praktiken att utvärdera elever under kritiktillfällen till förmån för nya metoder eller förbättra den övergripande utvärderingsmodellen genom att till exempel ge eleverna skriftliga utvärderingar. Avhandlingen avslutas genom att utveckla idén om att ge eleverna skriftliga utvärderingar genom att demonstrera användningen och funktionaliteterna av ett utvärderingsformulär.

Nyckelord: designstudio, utvärdering, arkitektonisk utbildning, pedagogik, studentinlärning

Table of Contents

Illustrations

I asked some fellow students to provide me with an architectural illustration made by themselves during the first year of their studies or before. I specified that the illustration could portray anything, be unrefined or polished, but that the image should represent the students' own architectural identity from at the time.

The illustrations are a representation of a group of student's varied backgrounds, values, and subjectivities at the onset of their architectural careers.

Acknowledgments

My instructor Anni has been incredibly supportive and constructive throughout my work process. Thank you so much for making each of our conversations such enjoyable experiences. Many thanks also go to my supervisor Jenni who endorsed my work and provided insightful feedback along the way.

Thanks to Viivi Virtanen, Kari Nuutinen, Mikko Inkinen, Anu Yanar, Mikko Tanneraho, Kristo Vesikansa, Jere Pääkkönen, Saana Rossi, Hannu Huttunen, Tommy Lindgren, Sami Markkula, Maria Laine, Helena Sandman, Saija Hollmén, Anna Fomkin and Anne Kinnunen for either sharing comments or contributing to my work or otherwise being helpful.

Several of my fellow students contributed to my work by sharing their own architectural illustrations. Thanks to Mathias Björkman, Petter Eklund, Kia Evon, Ida Fraser, Eero Ilvessalo, Toni Lahti, Tuomas Martinsaari, Lari Matero, Timo Paananen, Frans Saraste, Aino Sederholm, Salla Seppälä, Lotta Skogström, Ninni Westerholm and Meri Wiikinkoski for your kindness.

Thank you also to all of the students who took part in the student survey that I conducted and to the two teachers who agreed to be interviewed for this thesis.

Lastly, I would like to thank my lovely wife Amanda, whom I had the joy of marrying while working on this thesis.

1 Introduction

Foreword

My hope in writing this thesis has been to improve on issues of student evaluation on architectural design studio courses by investigating aspects of the course practices that have bothered me in my own studies. I believe that a pedagogically more sound model of evaluating students on design studio courses would offer better support for students to grow their own confidence as designers and get in touch with what they find of value and meaning in their lives. A student whose potential has been fully actualized is of greater value to the architectural profession and society at large.

Although I am, through my own experiences, criticizing the pedagogical practices on the courses at Aalto University, this work is not a critique of any one university. As my inquiry would demonstrate, the issues that I am addressing in my work have been systemic issues within the field of architectural education throughout the world for decades. My overall experiences of studying at Aalto University have been exceedingly positive. The idea of learning by doing and the creative possibilities of the design studio, in particular, have inspired me the most. In this sense, I believe my criticism only demonstrates my passion for the design studio course type.

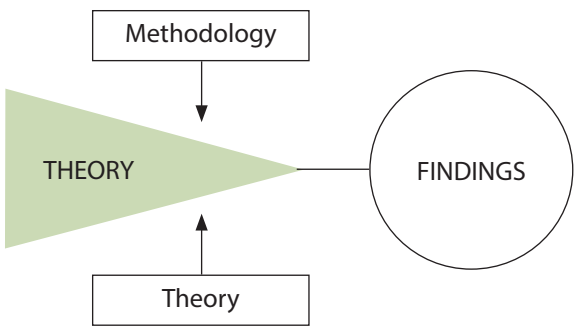
While I am addressing architectural design studio courses in my work, I also think that this study may be transferable to other fields and areas within the architectural profession. As Donald Schön writes: "*It* [architecture] *is perhaps the oldest recognized design profession and, as such, functions as prototype for the design in other professions*" (Schön, 1983, 77). Some of my friends in other creative fields such as industrial design have, in fact, recounted similar issues in their studies.

This work has not been commissioned or financially supported by any organizations or parties.

Thesis Structure

This study is *theory-led,* meaning that it begins with the introduction of a theory after which its validity is examined by using different methodologies. In this case, the theory that I am applying is my own criticism and thoughts on the education and evaluation of architecture students.[1] The central proposition of my criticism is that the prevalent model of evaluating student performances on architectural design studio courses is needlessly vague and pedagogically unsubstantiated.

Considering this approach, my thesis is primarily meant to be read as a journey, from start to finish. It has also been a journey of self-discovery for myself personally since my starting point has been to provide an account of my own personal thoughts and experiences after which I have desired to probe into the validity of my own thinking.



Model of theory-led research (Ray, 2016, 13).

[1] Theory-led research is usually applied to studies that are critique, analysis or dialectically oriented. Similar studies are also most often cross-disciplinary and broad, given that the theory (critique in this case) they apply usually borrows from thinking that belongs to different fields. (Ray, 2016, 13-14)

Methods

The methods used in this thesis include a personal account of my own experiences and thoughts as a student, a literature review consisting of a look into the official guidelines on student evaluation and a reading of the subject discussion in the *Journal of Architectural Education*, and a student survey combined with two teacher interviews.

Personal Account

My work focuses on the student experience in architectural education. Given that I am an architecture student (at the time of writing) my own experiences and thoughts are in themselves a valuable source of information. The chapter *A Student Account* is thus a broad deposition

of my own experiences and thoughts on the most troubling aspects of the education in my view. The precise purpose of this chapter is to be an individualistic and detailed account by one student. Since I wanted to keep my own testimony untouched or uninfluenced by any of the specialty knowledge I would be acquiring further on into my work, I wrote this chapter before I did any work on other parts of my thesis. This decision to depose my own thoughts in the beginning was also, in part, prompted by my assumption that my own thoughts would contrast the rest of my findings. By presenting my own thinking up first, I figured that I would ensure that my account was documented before I might be debunking concerns that I wanted to bring forth. Retrospectively, this may seem to have been an unnecessary worry, but it is relevant to note since it inspired the structure of my work.

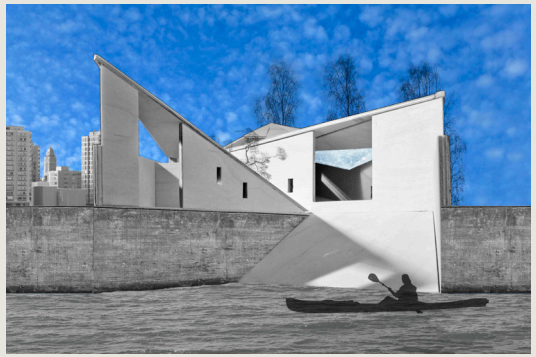
My own proposals for improving the model of student evaluation on the courses have I detailed in the chapter *Recommendations*.

Study Proposition

My own criticism is based on the following proposition:

Proposition: The prevalent model of evaluating student performances on architectural design studio courses is needlessly vague and pedagogically unsubstantiated. This has far-reaching and unrecognized negative effects on the education and field of architecture itself.

The testing of this proposition forms the basis of my inquiry. In my own account, I attempt to present an overall description of the multifaceted issues of design studio pedagogy that I trace back to the problems with the evaluation. Included are descriptions of my own experiences as a student.



Navigating the Literature

My literature review includes a description of the official guidelines on student evaluation provided by *The Finnish National Agency for Education*, *The Ministry of Education and Culture* and *Aalto Univesity*. The main focus of my review is my reading of the subject discussion in the *Journal of Architectural Education* from when the journal was founded in 1947 up until 2018.

Review Research Questions

Considering the criticism that I outline in the chapter *A Student Account* and its central proposition that student evaluation on design studio courses is pedagogically unsubstantiated, I defined the two of my

primary research questions for my literature review as follows:

Primary research question: What is the model of evaluation on design studio courses based on?
Secondary research question: Have critical voices been raised before on the matter?

Review Process

Before commencing my work on this thesis I had familiarized myself somewhat with the topic and come to find that literature on the way architecture students are taught on design studio courses seemed to be scarce. Even more so, there seemed to be a considerable gap in the literature with regards to the way students are evaluated on the courses.

The most noticeable works that caught my attention when going through university library literature were the doctoral dissertation *The silenced complexity of architectural design studio tradition: pedagogy, epistemology and the question of power* by Finnish architect Anu Yanar (1999) and the master's thesis *Contemporary ideals of architectural education – educating creativity* by Finnish architect Johanna Louhi (2010). Yanar's work also first introduced me to Donald Schön's influential work *The Reflective Practitioner* (1983), which offered one of the first major studies into the pedagogy of the design studio (Yanar, 1999, 18). Both Louhi's and Yanar's studies are partially critical of the model of education on the courses but only deal with the evaluation itself secondarily. In her dissertation, Yanar also makes the same remark as I had made that existing literature on the design studio overall is remarkably scarce. She further concludes that "*There is a great need for the kind of work that examines the complexity of the design studio tradition, its pedagogical processes, embedded epistemologies and power relations* (Yanar, 1999,12)." It seemed that by solely going through library books I couldn't get a hold of any writings specifically dealing with the evaluation on the courses.

Library of the Department of Architecture at Aalto University (2010)

I also explored official guidelines on student evaluation in hopes of finding formal information about the evaluation on design studio courses. Sure enough, *The Finnish National Agency for Education*, *The Ministry of Education and Culture* and *Aalto Univesity* all set general standards or stipulations with regards to student evaluation. Although I have included these findings in my review I should note here that none of the guidelines that I found dealt explicitly with the way architects are evaluated on design studio courses.

My next step was to consult teachers and researchers with relations to architecture directly for advice and directions. I also arranged meetings with two experts on university pedagogy with links to the education of architecture: Kari Nuutinen, specialist in university pedagogy and representing Aalto University's School of Arts, Design and Architecture, and Viivi Virtanen (Ph.D.), educational specialist in higher education and representing Aalto University's AllWell?-project. Virtanen

has also specialized in the evaluation of students. As it were, neither of the experts were familiar with the evaluation on design studio courses. After I presented a description of the current model of evaluation on the courses, it seemed clear to Virtanen that relevant pedagogical knowledge was not being applied in the evaluation. Neither of the experts are architects themselves, however, and haven't thus been introduced to the reality and subtleties of the model of education as someone having been educated to become an architect has. Nonetheless, both experts considered it plausible that the current pedagogical methods on the courses were being kept alive mainly by the authority of tradition. Virtanen cited own previous experiences in this regard. According to her, making any small changes in pedagogical traditions in any field always requires extensive efforts of changing attitudes and educating teachers. (K. Nuutinen, personal communication, 14 December 2017; Virtanen, personal communication, 22 November 2017)

A few sources directed me to study the *Journal of Architectural Education*, a central publication on architectural education. Reading the *JAE* then became the main focus of my literary inquiry. The following section details my process of reviewing the journal.

Although my attempt was to keep my inquiry more focused on the field of architectural education and the discussion among professionals teaching architecture, I felt obliged to also venture into the field of pedagogy in general to review the topic, given the scarceness of writing on the subject in the context of the field of architecture. I came to find that writing on *experiential education* and its sub-fields of *experiential learning*, *design-based learning*, *project-based learning* and *reflective practice* among other was abundant. Writings on different models of evaluation for these types of learning were also plentiful. Nevertheless, I still found it more pertinent to my particular study to keep the focus of my literature review on the discussion and writings on the topic within

the field of architectural education. In the end, the knowledge that the topic was exhaustively researched within the field of pedagogy did not change the fact that the topic seemed for the most parts ignored within the field of architectural education.

I also considered doing a thorough mapping of the topic by providing an account of the history of architectural education. However, the history of Finnish architectural education was relatively recently mapped in Louhi's master's thesis in 2010. A brief introduction to the history of the design studio is included as a part of the introductory chapter of my thesis (*The Origins of the Design Studio*).

Some relevant research papers were found by searching the internet, particularly from the *Universiti Kebangsaan Malaysia* (*UKM* or *The National University of Malaysia*). I decided to limit my review to my reading of the JAE and the official guidelines, however.

Reading the JAE

The *Journal of Architectural Education* is a peer-reviewed bi-annual academic publication that has been the main forum for commentary and research on architectural education since it was founded in 1947 (The Journal of Architectural Education, 2018). Considering the journal's central role as a forum for educational discussion within the field and after some initial probing into its archives, I decided to conduct a systematic literature review of the publication.[1] In order to confine my review to a manageable whole, I used the following methodology, which has been outlined by Arlene Fink (Fink, 2005 cited in Salminen, 2011, 10-11): First I acknowledged what my research questions were. My pri-

[1] A systematic literature review involves mapping discussions held about a certain topic and sifting through research that may provide relevant content (Salminen, 2011, 9).

mary question was "What is the model of evaluation on design studio courses based on?" and my secondary question "Have critical voices been raised before on the matter?" Next, I decided to use the database provided by Taylor & Francis online in examining the material.[2] I then decided to use the keyword "evaluation" as a means of sorting out the potentially relevant articles in all of the issues of the JAE. I also directed that the keyword could be found anywhere in the issues or articles. The use of this keyword in this manner garnered 904 results. In comparison, the use of the keyword "assessment" only garnered 668 results of which 383 also included the keyword "evaluation." I then proceeded to do a practical filtering of all of the results by primarily assessing the relevance of each article or item based on their title. In the majority of the cases, it was easy to determine right away whether the article was relevant or not. Titles that could easily be filtered were, for example, *Toward a Theory of Architecture Machines* or *Architects and Artists in Mamluk Society: The Perspective of the Sources*. In some cases, I opened the introductions or abstracts to the articles to assess their relevance. By systematically filtering the articles in this manner it turned out that the majority of the search results had to do with very different subjects or areas of evaluation within the architectural profession than what I was looking for. Furthermore, only 11 articles actually had the keyword "evaluation" in their title and only 2 of those actually had to do with evaluation on architectural courses. In other words, most of the articles that I approved for closer examination caught my attention due to the usage of other words that related to my subject such as "criticism," "design studio," "curriculum," "architectural education," "teaching" or

[2] Aalto University did not have access to physical copies of the journal, but electronic access was provided via the publisher Taylor & Francis online. However, since Aalto University only had access to the publication online from 1998 onwards I ended up visiting the library of the University of Helsinki from where I could access all of the issues via Taylor & Francis online.

"pedagogy." Eventually, I ended up filtering the results down to approximately 60 articles and proceeded to review the articles while making notes. I then continued by reading through my notes and highlighted the parts I deemed particularly relevant. In my attempt to be objective I paid special attention to mapping:

1. The historical perspective: If possible, reference articles from different times and not only some distinct eras when the topic might have been fashionable. Provide insight into how the discussion might have evolved.

2. General sentiments: Attempt to interpret general sentiments about the subject. Rather than focus on the opinions of one author, connect attitudes from several sources.

3. Opposing voices: Take notice of whenever texts have been positive or supportive of the prevalent model of evaluation or whenever the model of evaluation has been critiqued.

This process led me to narrow down my list of relevant articles to 27 articles. I then structured the highlighted notes thematically before compiling them into one chapter.

In my bibliography, I have included a categorized list of these 27 articles that I reference, as well as the rest of the 60 articles that I filtered. Anyone willing to complement my study will then easily have the whole scope of my source material to inspect.

The synthesis of my review can be read in the chapter *The Journal of Architectural Education 1947-2018*. The recommendations and ideas for improving the pedagogical practices on design studio courses by the various authors in the JAE have I detailed in the chapter *Recommendations*.

Surveying Finnish & Exchange Students

Survey Objective

The goal of conducting a student survey as a part of my thesis was first and foremost to provide an alternative student voice on the concerns that I voice in recounting my own experiences (chapter *A Student Account*). The goal of this survey was not to produce any definitive conclusions about the general sentiments of students. Such a survey would likely merit the sole focus of a master's thesis, if not of a doctoral dissertation.

Scope of Survey

This approach is reflected in the scope of my survey. I surveyed 33 Finnish and 30 exchange students at the Department of Architecture at Aalto University. I surveyed exchange students as well to get some context for how students are evaluated abroad and get a sample to be used as a reference for the group of Finnish students. The sample of exchange students includes students from 24 different schools from around the world.

In survey theory, a sample size of 30 respondents is commonly held as a minimum for comparing groups within a larger sample of at least 200 to 300 respondents (Heikkilä, 2014, 45). According to Raosoft's s*ample size calculator*, a sample size of 33 students among a population of 401 architecture students (the number of architecture students enrolled at Aalto University at the beginning of the 2017 autumn semester) generates a margin of error of approximately 16,36% (A. Fomkin, personal communication, 23 July 2018). For a common 5% margin of error, the recommended sample size would have been approximately 200 students.[1] (Raosoft, 2004) No definitive generalizable conclusions may thus be extracted from my survey. Rather, the results may, at best, be seen as suggestive of students' broader views and, at the very least, they portray the views of the specific groups of students that I surveyed, which was mainly what I was after.

[1] Results reached by using a *confidence level* of 95% and a *response distribution* of 50%.

Survey Methods

Instead of going for a large quantity of data, I did my best to obtain good quality data. As one survey expert does note: "The issue is not more data, it is better data" (Punch, 2003, 47).

I designed the questionnaire based on instructions administered by the *Finnish Social Science Data Archive* (*FSD*) among other sources. The FSD is a government-funded resource center that, for example, provides open access to information about data management and research practices on the internet. Instructions included paying special attention to formulating questions that are easily understood and unbiased, providing balanced scales for measuring answers and sufficient explanatory texts in case of confusions and making sure that answering the questionnaire would take 15 minutes at most. Further instructions included designing a clean and professional layout that is easily navigated and starting with some simple questions. I also translated the survey in Finnish for the Finnish students in order to make it as readable for them as possible. (Finnish Social Science Data Archive, 2010; Fowler, 2009, 86-113; Punch, 2003, 36-65; Fink, 2002, 39-66) The complete questionnaires in both languages are found as attachments at the end of this thesis (attachments 1 & 2).

In the Finnish language survey, students were asked to consider all design-focused courses worth at least ten credits in which they had participated when providing their answers. This was due to the fact that at the Department of Architecture of Aalto University, only master's level courses are referred to as studio courses, although the design-focused bachelor's level courses that are worth at least 10 credits are based on the same educational model as the master's level studio courses. I also made the decision of preferring to ask a few more questions and acquire more specific data than I would have the resources to comprehensively analyze rather than asking fewer questions and leaving out pertinent information that may turn out to be valuable for my analysis or for anyone desiring to expand on my study. For example, in question 3, I list ten different qualities of the course evaluation practices instead of

just two or three. While listing fewer qualities would have enabled me to analyze the distinct answers more thoroughly, listing ten qualities provides a more nuanced overall picture of the students' sentiments and still allows for a basic analysis. Given the relatively small sample size of my survey, a comprehensive analysis of distinct answers would not have either served that much of a purpose since any conclusions could hardly be generalizable. Instead, as mentioned, I wanted to obtain a fuller understanding of these specific students' overall thoughts on the subject.

The survey was group-administered by myself in person on three different master's level courses and one collective homework gathering organized by the Guild of Architecture. One teacher volunteered and conducted the survey on my behalf with the students on his course when I was prevented to be present on that date (survey 1, see attachment 3). I arranged each of the occasions in advance with the teachers and students in charge and the students were informed that answering the survey was completely voluntary and anonymous (Bourque, 2002, 148). By attending separate occasions with random students I ensured that my survey was answered by all types of students. This also guaranteed that I didn't draw students with any predetermined interests that would have skewed my results, as might have been the case with, for example, an internet questionnaire. I was only personally acquainted with two students who answered the questionnaire when I administered the occasion. The response rate for the survey was 100%, which could have hardly been reached in any other way than by personally group-administering the surveys. (Fowler, 2009, 75; Punch, 2003, 45-46) All of the five survey occasions were conducted between 8.3.2018 and 21.3.2018 which is midterm of the Aalto University spring semester.

Being present at the surveys also allowed me to briefly present my study, answer any questions and manage the occasions. My introduction included presenting myself and the subject of my thesis, notifying

the students that participation in the survey was completely voluntary and anonymous, telling them that answering the survey would take approximately 10 minutes, but that 15 minutes was reserved, requesting them to stay seated until 10 minutes had passed after which they could hand in their questionnaires or I would collect them, and that their participation would be greatly appreciated. I also mentioned that I had extra pens with me and emphasized that the exchange students should consider all of the design studio courses that they had participated in when providing their answers, including the ones in their home university. As it turned out, only very few questions were brought up. On one of the occasions, a couple landscape architecture students asked whether or not they should answer the survey to which I answered that if they had participated in any design studio courses they could answer the survey if they wanted. Eventually, only one Finnish landscape architecture student decided to answer the survey. A couple other students were interested to know when the thesis would be ready. Otherwise, the surveys proceeded quietly without interruptions. The teacher who conducted one of the surveys for nine Finnish architecture students also reported no questions. At each occasion, most of the students were finished with their questionnaires in ten minutes and those who continued longer finished well within fifteen minutes.

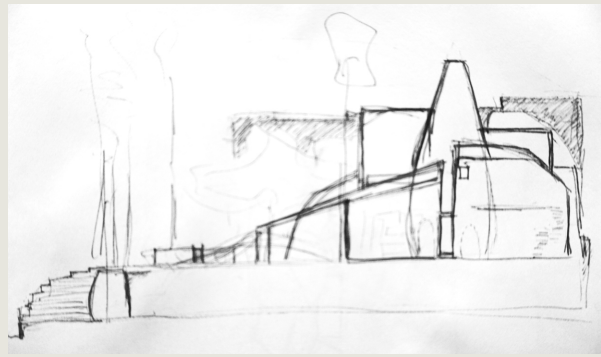
I organized all of the results using the spreadsheet application Google Sheets. All of the answers are compiled in attachment 3, excluding the respondents' background information. If the students had picked two alternatives of the same scale I disqualified that answer. There were only a couple of such incidents, however.

Issues with the Survey

As Floyd Fowler, a survey specialist, remarks, ”error-free surveys are not possible” (Fowler, 2009, 174). For one, it can not be made sure whether or not the students have, in fact, understood each of the questions in the way that they were intended to be understood. Additionally, I conducted the survey in two languages which makes it particularly difficult to ascertain that the English speaking and Finnish groups have understood the questions in the same way. However, the fact that the questionnaire did not raise any significant questions at any of the survey occasions indicates, at the least, that the survey was easily understandable. The overall student responses did not either point towards any common ways of misunderstanding the questions. Of course, this does not exclude the possibility of misinterpretations.

Apart from a couple of cases where the students had picked two alternatives for the same question (in which case I disqualified their answer to that question) the only common ”error” in the survey involved students forgetting to pick an answer on some specific question or questions. In one case, the student had not understood that the page had to be turned and left the second page of the questionnaire empty. A couple students also appeared to provide slightly contradictory answers. For example, one student gave an 8/10 on question 4.3 (The evaluation criteria on the courses are clear) and still checkmarked the statement ”The evaluation criteria on the courses are mainly vague” later on. Whether or not similar small contradictions in a couple of the students’ answers are due to misinterpretations or rushing with the answering, this serves as a reminder of not reading too much into the findings of the survey, given its small sample sizes.

I should also further recognize the narrowness of the survey of exchange students. In considering the findings one should remember that all of the students have in common one thing – studying at Aalto University at the time of the survey. It is impossible to say how the students’ experiences of studying at Aalto University may have affected their answers. In other words, the answers by the exchange students can solely be seen to represent students who have studied at 24 universities from around the world AND Aalto University. Extra emphasis should be put on their role as students of Aalto University since it is the university at which they were currently studying when the survey was conducted. The survey does not either inquire into how long the exchange students have studied at Aalto or how many design studio courses they have participated in at Aalto University. In order to be able to obtain generalizable information of a ”consensus of students from universities from around the world,” the sample size would not only have to be exceedingly large, but the survey would also have to be particularly detailed and well put together with a focus on students from different backgrounds.



The Teachers' Perspective

Interview Objective

The goal of interviewing two design studio teachers for my thesis was to acquire an understanding of how a practicing teacher approaches and frames the issues of evaluating students on design studio courses. My desire was to understand better the position of the teacher and what the difficulties of the evaluation might look like from an educator's point of view.

Interview Methods

I concluded that qualitative semi-structured interviews would best fit my objective. Initially, my plan was to conduct five phone interviews.

Before contacting any teachers I prepared an interview sheet containing all the relevant information about the interview that I would present to each prospective interviewee in advance when asking for permission to interview them. This included a description of the study, information that the interviewees' anonymity would be protected and that the interviews would be recorded, an estimate of the duration of the interview (15 minutes) and a list of the seven questions that would be asked in the interview. (Ray, 2016, 82-83) I also prepared a Finnish language version of the document for potential Finnish-speaking interviewees. Both versions of the interview sheet are found as attachments at the end of this thesis (attachments 4 & 5).

I then randomly chose five teachers out of a list of 20 design studio educators from Aalto University. This list was assembled by picking names that I could find in online design studio course descriptions from the past few years. Eight educators on the list were either professors or associate professors. In choosing which educators to request interviews from, I used Google's random number generator to achieve random choices (Google.com, ca. 2018). After having sent interview requests to the five educators via email, only one teacher agreed to be interviewed. Two of the potential interviewees did not answer after I sent them a follow-up email, one potential interviewee hadn't participated in a design studio course as a teacher for a while and thought that they weren't in touch with the subject enough to be interviewed, and one potential participant stated that they didn't have time for the interview. After having received the first rejection I randomly chose a sixth teacher to whom I sent an interview request. This teacher also agreed

to be interviewed. Following this round of interview requests, I spent a while working on other areas of my thesis. After getting back to working on these interviews, my thesis had developed and I decided that two teacher interviews would best fit the scope of my inquiry as a whole.

I conducted the two teacher interviews quickly after having agreed about the interviews with the teachers. One of the teachers, *interviewee A*, suggested that they could respond to the questions on the interview sheet in writing. This was fine with me and we agreed with the teacher that they would respond to the questions via email. The other interview was conducted as a phone interview as planned and it lasted 25 minutes as *interviewee B* opted to talk for longer than 15 minutes. During this interview, I also presented a few supplemental questions to the interviewee.

After the phone interview, I transcribed the whole interview and translated the most pertinent parts into English. I then showed the English language transcription to the interviewee so they could check that my transcription and translation adequately reflected their thoughts. As *interviewee A* responded to the interview questions in writing in English, I did not edit their text apart from removing segments that may have revealed their identity.

Both of the interviewees' complete answers are presented in the chapter *Two Teacher Interviews*.

Architectural Education

Although many readers may be familiar with the way architecture is taught in universities, I'll describe the education for those who may not have a background in the field. This way all readers will be on the same page continuing further.

This thesis focuses on the design studio, a specific course type which is taught just about all around the world in architecture schools (Webster, 2007, 26; Cuff, 1991, 63; Groat & Ahrentzen, 1996, 166). The teaching method conducted within the design studio is thought to be the primary means of conveying the actual knowledge of what being an architect requires (Schön, 1983, 79). The term studio roughly denotes that the course consists of completing some sort of a demanding project over the course of one semester (Cuff, 1991, 121). Depending on

the university and the choices of the student, credits received from design studio courses might make up over 70% of all the credits accrued through courses (Stevens, 1995, 119). This makes the design studio without a doubt the most integral part of architectural education in universities.

The rest of the architecture education consists mostly of traditional lecture courses spanning various subjects relating to architecture such as history of architecture, basics of construction and working as an architect. In addition to this array of different lecture courses, there are technical courses aimed at educating the usage of different software programs and practical tools. A certain amount of language, visual arts, and elective courses are also a compulsory part of an architect's degree. (Cuff, 1991, 121) Since the focus of my thesis won't be in these courses, I won't go into further detail describing them. This should, however, not imply that these courses are of any lesser importance in the education of an architect.

Studying at Aalto University

Looking at my own master's level studies in Aalto University alone, 47 credits out of the 90 required (excluding the 30 credits that come out of delivering this master's thesis) have I received from participating in design studio courses. In other words, design studios have made up roughly 52% of my master's level studies. According to the degree structure of the master's degree programme in architecture in Aalto University, students must complete at least three architecture studio courses, ie. 30 credits, in order to finish their degree. It is further specified in the degree structure that at least one of these three architecture studio courses must have a design focus (ie. involve any kind of creative design input related to architectural design). The bare minimum of required design studio courses would then be one, ie. 10 credits. However, studios without a design focus very rarely come along. Amassing the required number of credits to complete one's degree might often also entail selecting more than three studio courses.

In bachelor level studies courses aren't called studios, although they might imitate studios in every other respect. It is thus more difficult to estimate the percentage of credits amassed from such courses. However, looking at my own completed courses, I would evaluate that at least 50% of the 180 credits in my bachelor's degree have I received from courses that have closely imitated the design studio model.

Lectures are commonly a part of the design studio courses

The Design Studio Model

Details regarding the way design studio courses are conducted may vary depending on the university and country, but the general outline of the courses is commonly similar all throughout the world (Webster, 2007, 26). However, since studio courses are most often project-specific, even subtle differences in tasks invariably make every design studio unique.

A typical design studio course consists of one large design task that spans the whole course. Often there might also be sub-tasks that support the fulfillment of the main design task. The main design task might, for example, ask the student to design an art museum on a given location. In this case, a sub-task might then involve mapping out the given location in detail.

The studio is usually led by a professor or a university teacher who is supported by one or two subordinate university teachers and/or a number of instructors or senior student tutors (Anthony, 1987, 3).

Generally, the teachers hand out the task information, including the project parameters and requirements, at the beginning of the studio. These project details often vary widely depending on the project and the professor. Some task descriptions include relatively detailed specifics, while, on other studios, it might not even be known at the beginning of the course what the desired end project will exactly be. Such studios might instead build on some theoretical framework in hopes of deriving something new and exciting out of it. Eventually all design studios, however, require that some design project is handed in – almost exclusively in the form of some building design or other design that relates directly to the work of an architect.

During the studio, weekly lectures are often held by the professor or visiting lecturers in conjunction with the project work. Project work is either done by the students at home or at school in computer classes.

Students working in a studio setting at Aalto University (2010)

The final review

Many universities also offer private desks for each student to work at creating the physical environment of an actual studio or workroom for architects (Cuff, 1991, 120). Whether or not the students share a workroom in school, course meetings are held at least once or twice a week. During these class gatherings, the professor and assisting teachers and

instructors circulate in class giving instructions and offering comments to students on their project work.

The final review, or most commonly the crit, concludes almost all design studios. Along with the project-natured form of the design studio, the crit is perhaps the most defining characteristic of the studio course model. Often studios also include midterm reviews. During the crit, the whole class gathers to review each of the students' finalized project works. Almost exclusively, the review involves that each student presents their own final work in front of the whole class. In addition to this, a jury is assembled to review each piece of work in front of the class after every presentation. The review juries usually consist of all the course teachers along with a number of guest reviewers (usually outside architects, experts, fellow professors or teachers). (Parnell & Sara, 2000, 3-21)

After the final review, students usually receive one grade for their work at a later date after the course has ended.

The Origins of the Design Studio

The origins of the design studio may be traced back to France at around the beginning of the 20th century. The *Ecole des Beaux-Arts* in Paris, founded in 1648 and one of the world's most renowned schools of art and architecture at the time, employed a curriculum where students progressed in their studies by winning design competitions. Lecture courses were organized along with competition programs that students worked on in *ateliers* or studios. The studios were led by practicing architects who were called *patrons* (design professors) and who provided feedback to the students on their projects in the evenings. Design juries were arranged at the end of the courses to review the students' works. (Draper, 1977, 209-212) At the Ecole, design reviews were conducted

behind closed doors, however, and students were assessed by the virtues of their works alone. This differs from the prevalent current practice where students present their works orally and the reviews are conducted in front of the entire classes. (Anthony, 1987, 3)

2 A Student Account

Having given the matter some thought, I believe my issue with design studio pedagogy is twofold.

Firstly, I have experienced that students who desire to explicitly follow their own artistic sensibilities in their design studio projects are usually undermined by the model of education conducted on the courses.

Secondly, I believe that the prevalent model of evaluating student performances on design studio courses is needlessly vague and pedagogically unsubstantiated, which has far-reaching and unrecognized negative effects on the education and field of architecture itself.

Artistic Guidance

The first part of this problem is a more personal one since all architecture students do not necessarily desire to pursue their own artistic sensibilities as obstinately and freely as some others, like I, do. In fact, in my experience, most students cherish the idea of receiving artistic guidance from course professors and teachers and letting their own sensibilities be directly influenced. This is not a bad thing, of course, as long as the students are willing to go along with this. A teacher's advice might arguably be one of the most valuable and valid sources of influence an artist may hope for.

Architecture theorist Dana Cuff summarizes this intent of studio education well in her book *Architecture: The Story of Practice*:

> "The typical studio instructor is a practicing architect who provides a living example of what it means to be a designer. In studio, students gather the individual instructor's method and Weltansha-

uung, and with each new studio another possible approach to architecture is layered upon the last, from which students will determine their own professional course (Cuff, 1992, 121)."

In some studio courses around the world, the given starting point for the coursework may even be to specifically imitate the architectural style of the professor and follow their instructions closely throughout the course. I don't believe there is a problem with this type of teaching if it is explicitly specified that the course entails pursuing the professor's or teacher's artistic sensibilities.

However, stylistic or artistic imitation of any kind has never been an explicit requirement on any studio course that I have attended, although it has been a well revered unspoken rule to follow in most cases. The contradiction here comes from the fact that on most of these courses the leading professors and teachers have often encouraged us, students, to contrarily be brave, takes risks, make mistakes, follow our own sensibilities and evolve into architects with singular voices. These encouragements also represent my own approach to coursework on design studios. However, instead of following through on these encouragements, most teachers have, to varying degrees, ended up wielding their influence on us students in accordance with their own sensibilities.

Case Study: Being Unduly Influenced

On one studio course that I attended, our task as students was to come up with some new kind of an architectural project with some sociopolitical agenda to it. There were basically no limits to what the project could be and how it could look like.

Before commencing work on the main project itself we were asked to complete a subtask of reading a certain book and writing a short commentary piece on it. My commentary piece was critical to some aspects of the the book and I was forced to rewrite it three times in an attempt to get me to conform to the parts I had taken issue with. I did my sincere best, but was unable to conform sufficiently to the teachers' views on the book and eventually my assignment wasn't even acknowledged as a coursework. It was apparent that the teacher was very fond of the book, while I found parts of it to be problematic. I barely managed to keep myself enrolled in the course after the incident. This episode serves as an example of perhaps my most extreme and concrete experience of being asked to offer my own voice, but then being influenced to conform with the teachers' views.

Later on, while working on the main assignment for that same course, it also became clear that there were very specific artistic parameters that we as students were expected to follow, although none of these were explicitly mentioned in the description of the assignment. On a few occasions, I insinuated the question of whether our teachers desired us to imitate the aesthetic and artistic qualities of similar architectural sociopolitical projects that we had been familiarized with to which the answer was an absolute no. We were expected to wholeheartedly do our own thing. The truth was, however, that all our projects ended up looking strikingly similar to these projects and each other. While being instructed by our teachers during the course it had become clear to every participating student that by imitating the teachers' sensibilities one would get more favorable reactions to one's work. Going for your own style only meant unnecessary disputes and could possibly result in a worse grade or even flunking the whole course.

Considering the Teacher's Position

It needs to be recognized here that although I am critical with regards to many of my teachers' pedagogical incompetence, I have never experienced that any teacher would have been incompetent out of spite (excluding some very rare cases). Having had to come to terms with situations like the aforementioned I have tried to imagine myself in the position of a teacher and come to realize that being a design studio teacher in architecture school cannot be very easy. That is to say that allowing complete artistic freedom to a student and at the same time wanting to function meaningfully as a teacher to that same student is probably a difficult task for even the best pedagogues.

In short, the notions of being a student readily willing to take risks and make mistakes (ie. following your own unrefined artistic sensibilities) and being a teacher willing to support a student and help that student avoid making mistakes essentially contradict each other. As a teacher, you can't really encourage your students to make mistakes and help them avoid making mistakes at the same time.

It is easy to conclude how this type of a scenario plays out. Eventually you, as a teacher, will be compelled to start curating what mistakes, or rather choices, you'll allow being made by your students. For example, you'll see the nth student in your teaching career come up with the idea of a round house and tumble into the same old troubles the idea will lead to that you know all about (or at least think you do). Maybe you'll restrain yourself and you won't declare the idea an outright mistake, but you'll hint at it. You might just appear uninterested and the student will get it, "I'm not getting a good grade following through with this decision," they'll come to learn. This will continue happening regarding both smaller and larger ideas and decisions made by the students in their projects. Soon the culture in the school will have changed. The notion of taking risks and making mistakes will be

forgotten. Instead, the courses turn into exercises about making the right choices that concur with the teacher's sensibilities.

Who's to blame in a situation like this? Not so much the student nor the teacher, but ultimately the lack of a theoretical framework to rely on, namely a system for evaluating each student work as fairly and objectively as possible. However, I should acknowledge that I do believe there are ways for the individual student and teacher to improve such situations, too.

Responsibilities of the Teacher and the Student

I should reiterate that this first part of the problem that I have described is one that I have experienced that not so many other students tackle with. I am at the far end of the spectrum of students who even feel a bit violated when being unwantedly influenced or pressured in one way or the other in artistic matters or other matters that in my opinion are open for questioning. Given this attitude, one could argue that I'm not a very good student to begin with. What am I expected to learn if I won't listen to what my teachers tell me? This is of course not the way I see it, although I acknowledge that this is the way that I might easily be perceived in and in most problematic situations have been. However, most students seem to adjust well to receiving all kinds of unsolicited directions (or perhaps solicited if you're welcoming it) from professors and teachers. Given this, I have to acknowledge that I probably owe a large part of the responsibility of improving these situations myself. For one, I could do my best in trying to better listen to my teachers. Not perhaps trust them blindly, but at least consider their viewpoints and perhaps get inspired by what they have to say and actually cultivate a deeper understanding of art, architecture and the world. Secondly, if I don't want certain management I could do my best in trying to

communicate how I'd preferably be mentored. Ultimately, if I remain unhappy with the situation I have the responsibility to provide feedback on the courses. Or, as is the case here, study the matter in a thesis.

I won't refute any of these points. However, the teachers also owe a responsibility in these dialogues. For one, the teacher should also attempt to keep an open mind with regard to any objections the student might have to the teacher's comments. Although the teacher might admittedly have a more refined taste in art and more experience, there is certainly often room for learning both ways. What's more, in my view the teacher should be extremely delicate to not force any decisions on the student. If the student should choose to not follow the teacher's directions, this choice should be encouraged, too. At the least, the student should not be reprimanded for following their own sensibilities that might be contrary to those of the teacher. Secondly, the teachers could inquire from each student what type of support they would like before offering any. If a student should ask a teacher for only technical advice and emotional support (projects can be mentally demanding and exhausting), this should be an option, too. My best teachers have been quite brilliant pedagogues who have given me great amounts of creative leeway while supporting me wholeheartedly on both technical and emotional matters as well as artistic ones when invited to do so. Again, at the least, teachers should not reprimand the students and seclude them from their support if asked to back off on artistic matters. Coincidentally, students who like to go for their subversive own thing need that much extra support in navigating their way through the technical difficulties and the emotional roller coaster that creating something new and personal entails.

The Core Issue: Student Evaluation

This brings me to the second part of the problem that I believe is at the center of this thesis. While I may be an exceptionally stubborn student to mentor artistically in class, I believe all students suffer from the way student and project evaluation is conducted on design studio courses. I also think that most students and faculty personnel have been institutionalized and blinded to the deficiencies of the evaluation and might not understand, or have the tools, to criticize and improve it. Furthermore, I believe that the effects of the current model of evaluation have far-reaching and unexpected destructive effects on many areas of the education and even the whole field of architecture.

Lack of Structure in the Evaluation

In short, I believe that the problem with the way students are evaluated on design studio courses is that there are really no guidelines to it. Or, if there are, these are not enforced in any meaningful way in my view. In practice, the leading professor and teachers in charge kind of improvise the whole evaluation and produce one grade for the student based on their own sensibilities. The improvisational devising of the grade includes two parts, both of which I view as problematic: the public review and the determining of the final grade behind closed doors.

To begin with, I should justify why I would say that the grades are more or less improvised. After all, the degree regulations of the School of Arts, Design and Architecture of Aalto University stipulate that "*The specific evaluation criteria used on the course shall be communicated to the students no later than at the start of the course* (Aalto University, 2018b, section 28)." In other words, students should know on what basis and how they are evaluated. However, in my experience, in most cases, no

evaluation criteria are offered to students at the beginning of design studio courses. I only remember receiving information about evaluation criteria at the start of the course on two of the four studio courses that I attended. On both courses, the given evaluation criteria were indecipherably vague and, in my own opinion, even outright falsely representative of the final evaluation. At the least, I have not once during my studies received evaluation criteria on studio courses that have by any stretch of imagination been specific. In essence, projects are evaluated by solely relying on the teachers' opinions (or, as is oftentimes the case, only the leading professor's or teacher's opinions).

Again, I should note that I do not believe that the fault here originates from any teacher's unwillingness to follow university regulations. Rather, I believe that the problem is systemic. In other words, it is very difficult for the teachers to create meaningful evaluation criteria without a theoretical framework to rely on in the evaluation. For example, a math teacher needs to be able to rely on mathematical structures in order to be able to evaluate whether students solve their exam tasks correctly. In architecture school, it is not that simple. Architecture, as in art, does not lean on factual truths as maths does. Instead, in art, there may be many different correct answers. As it is, to my knowledge, no rules or guidelines whatsoever are given to teachers on design studio courses in order for them to be able to conduct any sort of a "correct evaluation."

Given this situation, one could argue that it is simply impossible to draft specific and generally functional evaluation criteria on artistic projects. Since art is such a widely interpretable medium with fluctuating trends, perhaps subjective evaluation is really the only way to do a proper evaluation. Perhaps it should just be accepted that each course evaluation only represents a subjective opinion of the leading teacher or teachers. I concur with these sentiments myself in part, although I will get to my own views on a solution later on (see chapter *Recommendations*).

This means that, in general, the only evaluation criteria that are enforced in actuality are those subjectively determined by the leading teacher in whichever situation. The problems that arise from this have a lot to do with the the problem of intrusive tutoring that I started off with describing. For one, as a student, it becomes impossible to defend one's own artistic sensibilities if your teacher opposes them without any proper evaluation criteria to rely on. This enables situations where the teacher may, if inclined to do so, force the student to abandon their own views and artistic sensibilities. Without specific evaluation criteria, anything the teachers say is good may be considered good and anything they don't like may be considered bad.

The Final Review: The Method and Some of its Problems

At present, the main part of the evaluation is then conducted during the final review in an improvisational manner. In practice, each student presents their project before the class and the evaluation jury, after which the work is evaluated by the jury. There are rarely any scripted ways for the evaluation procedure to be conducted, which entails that students get treated often very differently. The final reviews might take up to six hours or more to plow through as each project is discussed for approximately fifteen minutes to half an hour. Sometimes only some nitpicky element of a project is discussed, sometimes the discussion digresses from the topic of discussing a project at all, sometimes all the jury members are tired from sitting four hours and don't pay as much attention to a project, sometimes only one jury member talks the whole time, sometimes some aspect of a project isn't liked and the discussion of the whole project is negatively tainted. In my experience, the pre-

vailing understanding among students and teachers alike, with which I concur, is that the final review isn't even intended to be an objective evaluation. Instead, it is regarded as a forum for ideas, inspiration, and learning by listening to more experienced architects casually debate about each student project amongst themselves. Granted, often interesting tidbits of insight are shared and selected projects are given their due appreciation. However, in my view, it is clear that as such the final review does not constitute an objective academic evaluation.

I should note here that although the final review is a central part of the evaluation process on design studio courses and it will likely be referred to a lot in this thesis, it will not be the focus of it per se. Rather, the focus of this thesis is the overall evaluation provided to students. I would like to point this out because in my view there are a lot of aspects to the way final reviews are conducted that I also find problematic. However, since these problems are not the main focus of this thesis, they will only be dealt with in passing.

For example, the final review causes a significant amount of stress. Students dread having their hard work be ripped apart in front of everyone and having to stand tall through it all. This gives the teachers even more authoritative power over the students since you can't afford to get on the wrong side of your teacher knowing that you'll have to face that teacher in a court hearing of types where you're the sole defendant in front of a biased design jury. This also puts a peculiar presentational emphasis on appearing sympathetic or compliant to the teacher's comments. To be frank, this generates a lot of nonsense talking both ways in final reviews, in my view. What's interesting is that architects in work-life rarely, if ever, actually have to participate in such jury presentations and evaluations, to my knowledge. Usually focus is put more or less wholly on reviewing the work alone or side by side with clients. This eliminates the argument that the final review practice specifically

prepares students for work life. Another argument is that students learn argumentation skills by discussing their work with the juries. However, since the relationship between the students and teachers remains asymmetric, fair argumentation is, in effect, made impossible. On all occasions that I've witnessed, every single time a student has provided any sort of argument (other than purely factual) countering any of the jury members' comments, that student has effectively been put down. Without going into further specifics, I do want to conclude that I do not oppose the practice of conducting final reviews, although I do think there is much room for development. Nonetheless, while the final review undoubtedly contributes to providing feedback to students and generates educational discussions conducted by the jury members, it does not constitute a proper evaluation by itself, in my opinion.

The Final Grade

Generally, only one grade is given to each project within four weeks after the final review. Given the nature of the final review, the final grade does not necessarily reflect the discussion held about the project at the final review. This way of receiving a final grade, which in contrast to the final review officially aims to represent an objective evaluation of the coursework, is perhaps the most problematic part of the evaluation process in my view.

The Significance of the Final Grade

The final grade carries significant weight with the students' motivation. To begin with, getting into architecture school has for most students required performing at the top of their classes throughout their preceding school careers. The entrance exams into the Department of Architec-

ture at Aalto University are also demanding and eliminate over 90 percent of the applicants. In other words, most students are accustomed to performing well in school. It is also my experience that good grades are desired intensely on design studio courses. Consequently, given the nonexistence of relevant evaluation criteria, the competition on studio courses quite literally knows no limits. Apart from attempting to conform to your teachers' artistic sensibilities, the best way to possibly ensure receiving a good grade is simply by doing the most work on your project. This results in the well-known culture, common among architecture schools around the world, of students working around the clock on their projects for the final weeks before handing in the final work. As studio courses usually last three to four months, it is clear that having put that much work into something, the final grade functions as an important motivator for the student. The grades indicate that the students' efforts have been worthwhile and that they're doing the right thing. They are an important reinforcer of the students' self-esteem.

My Personal Grades

Although I still stand by my critique with regards to the model of evaluation, I cannot claim to have generally been given remarkably unfair grades on the four design studio courses that I have participated in. My grades on the four courses have been 4, 4, 2 and 4 (5 being the best grade on a scale of fail/1/2/3/4/5). Retrospectively, I would say that my course works have either been too unorthodox or too ambitious – and consequently too unrefined – to merit unreserved appreciation from the teachers. Some of the critique I am providing also stems from experiences on other courses that have had identical models of evaluation but have not been categorized as design studios.

Although I can only claim to have been given an unfair grade (in my view) on one of my four studio courses, I would still apply my critique largely on all four courses. In the end, none of the courses provided more than vague evaluation criteria for the students at any point of the courses and the reasons for why individual works merited their respective grades remained more or less mysterious. Ultimately, none of the courses managed to instill an experience of having been a part of an all-around proper or impartial and considerate evaluation. Although I might have felt deserving of a higher grade on all courses, I still had no idea whether I'd eventually really receive a 3, 4 or a 5, not to mention a 2. To be fair, I should note that the pedagogical expertise varied a lot on the courses, in my experience, and I did feel significantly more confident about receiving a fair evaluation on the courses with teachers that I felt were more competent in this regard, although the practical model of evaluation was identical on all courses. I should also note that my critique has not so much to do with arguing whether or not the grades that teachers provide at present are "correct" as much as it has to do with providing the students with a proper evaluation and means of deciphering the given grades. It might even be that most students would receive more or less the same grades, were they evaluated in a more deliberate manner.

I do believe, however, that the more the final grade contrasts the student's expectations, the more clearly the problems with the model of evaluation present themselves. A grade that corresponds to the student's expectations is easier to understand for the student as the student may always justify their own grade with their own view of their work. A grade that contrasts the student's expectations and that is not substantiated is a different matter. I believe it is relevant for me to describe my own experiences in this context, having received a 2 on one of my courses and not understanding why.

Case Study: Being Unfairly Evaluated

Our tasks on the course in question (not the same course as in the section *Case Study: Being Unduly Influenced*) were, again, rather open in the beginning and each student ended up developing distinct architectural projects. The course lasted three months and consisted of three tasks, the third one being developed out of the two previous ones. The first task lasted five weeks, the second task lasted one week and the third task lasted four weeks. In practice, students put equal amounts of effort in the first task as they did in the last. Vague evaluation criteria were provided at the start of the course, eg. ”students will be graded based on their commitment to the course, expertise in their craft, representational skills and the clarity of their work.”

I received, in my own experience, enthusiastic reviews for the first two of my tasks at the two respective midterm reviews. In fact, the main two teachers of the course explicitly stated in the review that my work on the first task was a ”top work of the class.” The second task was a minor task, although it too was well received. The final review for the third task took over six hours and lasted two hours longer than intended until over 10.00 p.m. I was one of the last students to present my work and I received mixed to unenthusiastic comments on the work. By that time we were over an hour late in the schedule, one of the jury members had already left and the rest seemed rather sick and tired to still be sitting there. At that point, the best response any student received was by getting the jury members to joke about the works which would raise their spirits.

During that semester I only participated in one other course worth 5 credits and otherwise focused solely on the studio. I even dropped out of one other course worth 5 credits in order to save my efforts for the studio. That remains the only course that I have ever dropped out

of. Correspondingly, I ended up putting all my efforts and most of my spare time in the work on the studio. In the end, I was quite proud of my work and felt rather confident that I might receive a 5/5. Usually, I wasn’t the last student to exit school on the preceding nights before the final morning deadlines, but this time I felt that it was worth it to stay up all night to make sure I left as little to chance as possible with regards to having the work evaluated.

Obviously, the grade 2 I received came out of the blue to myself, although I hadn’t had a very successful final review. By that time in my studies, I had learned to not read too much into the final reviews, however, as the impressions they give are often in some contrast to the final grade. After receiving information about the grade over the internet almost two months after the final review I quickly contacted my teacher via email to ask for a written evaluation that would explain my grade. I was then told that I had been given the grades 3, 4 and 1 for the three respective tasks on the course. Furthermore, I was told that the first task accounted for 5% of the final grade, the second task accounted for 15% of the final grade and the third task accounted for 80% of the final grade, which meant that my weighed average grade was 1,55. In the brief written assessment that was provided to me along with this information, my teacher only told me that my final work was of very low quality and the major problem was that I did not progress enough with it.

Not surprisingly, all of this was new information to me. Most importantly, the weighing of the separate tasks with regards to the final grade had not been communicated to anyone on the course. This was rather upsetting given that most students put most of their efforts into the first task and the emphasis put on that task had been more or less equal to the emphasis put on the last task. The grades for each task had neither been communicated to anyone previously. Given that the

weighings seemed so out of proportion, I could not avoid getting the impression that my teacher had simply come up with them retroactively in order to be able to justify my, or anyone else's, evaluation. Nonetheless, there was little I could do about it.

Receiving the grade 1 for my final task seemed inexplicable to me too, not only because I had regarded it so highly myself. An important part of considering that grade is putting it in context with the grades that other students received for their final task works. While all of the students on the course worked on their own distinct projects we had been divided into pairs so that each pair planned their project on the same physical lot. Each pair was consequently asked to closely follow each other's work progress, support each other and learn from each other. Every time course meetings were held, each pair functioned as one unit and received directions and feedback from teachers simultaneously. Eventually, my partner received the grade 5 for the final task in contrast to my 1. What made this interesting was that we knew everything about each other's works and what the teachers had said to each of us during the course. I and my partner got along well and were equally dumbfounded by how differently we had been evaluated. It seemed as if we could have easily swapped grades for the evaluation to make as much sense. In fact, not to devalue my partner's work, my final work fulfilled the explicit final requirements to the point, while my partner's work lacked a quarter of the requested key materials. Apart from this, our workloads were more or less the same, the complexity and ambition of our projects were more or less the same, the level of visual and technical proficiency was more or less the same and we were both active in class and participated 100% on every course-related meeting, lecture or other events. I was even active in organizing extracurricular activities outside of class for the benefit of the course. It was also bizarre knowing that both of our works had progressed in equal regards, given

that my teacher had cited the lack of progress of my work as the major problem of it. The feedback we both received on the course meetings did not either differ in any significant regard. Both of our conceptual ideas for our works had also been legitimized by the teachers before we commenced our work on them. The only critical comments I received about my work while working on it were cosmetic remarks about the design two weeks before the final deadline. This I remember having always written down the feedback we received from our teachers at the meetings. The functioning and conceptual idea of my work were appreciated the whole time. Looking at it from the outside, my final grade did not seem to be based on anything but an arbitrary impulse.

Of course, I communicated all of these questions I had to my teacher via email and requested to be re-evaluated since I found out that students have the right to submit such appeals to their teachers according to the academic rules and regulations of Aalto University. My teacher responded to me telling me that this was not a possibility. I then referred the rules and regulations to my teacher after which I received no response in two weeks and sent another email asking whether my teacher had read the previous one. Eventually, I received a reply telling me that my teacher would be meeting with the headmaster of our school to discuss my concerns, which was bizarre since the headmaster had nothing to do with the matter. I then responded asking why my teacher would be meeting with the headmaster, after which I never received a reply. According to the rules and regulations, my teacher should have submitted an independent decision about my appeal to me in writing, supplemented with instructions for appealing against the decision to the Academic Appeals Board. I kept waiting for a reply until I gave up on the matter. Three months had passed since the course had ended, I was fully working on my next studio course and it felt exceedingly unpleasant to revisit the matter. Although I felt confident that I had been

unjustly evaluated, my teacher's disdain for my work had nevertheless taken its toll on me and it felt disheartening trying to promote my case against someone who thought that my work had been so inexplicably bad. It also felt bothersome to write yet another email asking about the last one and the notion of having the headmaster meddle in a small student affair made me uncomfortable. To be honest, I was slightly afraid of having my teacher spread rumors about how bothersome I was being among other teachers. This sentiment may seem far-fetched and I am making no claim of this having happened. However, the Department of Architecture, as well as the professional field of architecture in Finland, is a relatively small community and if bad word of mouth were to spread it may conceivably affect your reputation and career opportunities. Thus, in the mind of someone opposing a representative of an institution with wide-ranging connections, these fears may seem more real than they perhaps are. Furthermore, the thought of having my work eventually re-evaluated by the Academic Appeals Board seemed stressful too. Would I seem even more bothersome having other architects come in and evaluate my work? Would I only be perpetuating a common consensus about how bad I was as an architect? I had never heard of anyone having their work re-evaluated by the Academic Appeals Board and knew little about how they conducted their evaluation. I wasn't sure whether my teacher would be a part of the board to provide a teacher's assessment of the work. Would I even get a fair chance? Given all of these concerns, it then seemed a better option to leave the matter in the past and move on instead. After all, it was just one grade for which I had already sacrificed all too much. In part, however, I realized that this was probably how every other student reacted in my position and no one would ever do anything to make things better.

I was not the only student on the course that received a seemingly incomprehensible grade, which in part eliminates the thought of

my teacher having had anything against me specifically. Apparently, seemingly arbitrary grades were simply the style of my teacher. Perhaps something akin to a Gaussian curve was used to distribute the grades and someone had to receive the bad ones. Nevertheless, while I am inclined to believe that the seemingly unjust way that I and some other students were evaluated in was overall a rather radical exception on courses at our Department of Architecture, I believe that my experience exemplifies in large parts the potential pedagogical deficiencies of the model of evaluation on design studio courses in general. I, for one, cannot claim to have learned anything by having been evaluated on the course. At least by receiving an appreciative grade, I would've known that my work had been worthwhile and that I could trust my own views about it, at least in part. Receiving a poor grade without any specific notes attached, other than seemingly disconnected comments about my work being of very low quality and not having progressed enough, was only counterproductive for me. Furthermore, without clear evaluation criteria or evaluation guidelines, my teacher could determine my grade in any possible way and refer to whatever quality in my work to justify my grade. I had no verifiable or valid opinion to offer in order to defend myself having no knowledge of any relevant evaluation criteria, including any previous knowledge about the weighing of the different tasks and my actual grades for my previous tasks. To me, the only fathomable reason as to why my teacher would have disliked my work so much was that I did not follow the feedback I was provided regarding the cosmetic design detail, because I did not agree with it. Did I deserve a four numbers lower grade than my partner because of this? In my opinion by no means, obviously. Again, from my perspective, this exemplifies to which extent a teacher may ultimately punish you as a student and pressure you to give up on your own personal sensibilities if you do not follow your teacher's wishes in your design decisions. In

this case, I had not even had a clue that the design detail might have been that important to my teacher (presuming that the detail, in fact, spurred my teacher to relate so negatively towards my work).

Despite all of these pedagogical shortcomings, the fact that my teacher did not adequately follow the school regulations with regards to my appeal was the only actual statutory misstep that my teacher made. Even so, I remain responsible for giving up on the matter myself and I can only imagine that from my teacher's perspective the matter did not seem as pressing and might have easily been forgotten or buried under other work either deliberately or due to other circumstances. However, the psychological effects on the student of having to try to appeal to a teacher, who in many cases may, perhaps understandably, seem disinterested and unsympathetic with regards to the matter, should, I believe, be recognized in this context. As I experienced, having the matter stall became increasingly disheartening, which led me to give up on the matter.

Of course, although my goal here has been to provide a specific and objective written description of past events, the fact that my perspective is subjective cannot be escaped. It may be that I deserved the grade I received and I remain blind to my own work. However, as mentioned before, my critique has not so much to do with arguing whether or not the grades that teachers provide at present are "correct" as much as it has to do with providing the students with a proper evaluation and means of deciphering the given grades. I should also underline that I do not believe it is common for the evaluation on design studio courses, in general, to be in so stark contrast with the expectations of individual students as it was in my experience on this specific course.

Potential Negative Consequences

I would like to conclude this chapter by summarizing only a few of the potential negative consequences of these issues with the model of evaluation. Some of these issues would merit deeper discussion, but I have combined them here for the purpose of limiting this chapter.

1. Unnecessary student stress: Vague criteria causes students to continually question what they are doing or have done.
2. Loss of confidence/self/motivation: Having to rely on the teachers' approval in their decision-making, students may lose touch with themselves. Final reviews may also be discouraging.
3. Ineffective studying (and teaching): Unclear evaluations make it difficult for students to effectively better themselves. Uncertain demands may make it difficult to regulate one's own studies.
4. Student exhaustion: The endless competition on the courses and undefined evaluation criteria may push students to exhaustion.
5. Silenced criticism: An authoritative culture where the students' success in their education depends on their teachers' personal acceptance may muffle all types of criticism.
6. Prolonged studies: A consequence of previous issues. According to Aalto University's *Management Information Services*, students currently graduate on average in 8,5 years (average between 2013-17) (A. Fomkin, personal communication, 20 March 2018).
7. Lesser professional abilities: A cause of ineffective studying.
8. Artistic/architectural decline: New views and voices may be lost if the education does not cultivate what makes each student unique.

3 Reading

What Do Official Guidelines Say

The *Ministry of Education and Culture* stipulates in their *Universities Act* the following about student evaluation:

> ”Students have the right to obtain information on how assessment criteria are applied to their study attainments. Students must be given an opportunity to see the assessed written or otherwise recorded study attainment.” (section 44, subsection 1)

Further on in the act, in section 82, subsection 4, it is stipulated that a student dissatisfied with the grading of a study attainment may appeal for a *rectification request* directly from their teacher. If dissatisfied with the decision of their rectification request, students may appeal

for rectification from a degree board. Further details are also provided regarding the time frames for these appeals. (Ministry of Education and Culture, 2009)

The *Aalto University General Regulations on Teaching and Studying* are based on the legislature in the *Universities Act* and cite both of the aforementioned sections in slightly modified terms:

> "...the teacher has to inform students how and when they will be given the opportunity to familiarise themselves with the grading criteria and with the application of those criteria to their own performance." (section 30)

The general regulations also specify that the *teacher-in-charge* of a course should be the one grading any study attainments on that course. Other staff may assist the teacher in their assessment (section 27). The grading scale on courses is also determined. Either a scale of fail/1/2/3/4/5 shall be used or a scale of pass/fail (section 28). (Aalto University, 2010)

The *Finnish National Agency for Education* provides a lengthy list of over one hundred reports on evaluation that can be read online (Finnish National Agency for Education, 2018). The contents of the reports range from evaluating pupils in elementary school to evaluating inmates who conduct studies in prison. There are also a couple thorough general guides for student evaluation like the reports *A Framework for Evaluating Educational Outcomes in Finland* or *Arvioinnin opas* (The Evaluation Guide [free translation]). The reports are extensive in providing insight into pedagogically sound practices for evaluation. For example, the aforementioned English-language publication states:

> "Evaluative conclusions should be as clear and unambiguous as possible. It is these conclusions that summarise the findings of the evaluation. In the analysis of evaluation data it is necessary to bear in mind all the value definitions and explicit stipulations that form the basis of evaluation." (National Board of Education, 1999, 58)

It is also concluded in the same publication that evaluations need to be documented and reported in order to benefit the development of education. It is the *National Board of Education's* responsibility to publish new information on evaluation and bring it to official decision-makers' attention (National Board of Education, 1999, 68).

At present, none of the reports deal exclusively with the evaluation of architectural study attainments, however, nor do none of the general guides recognize the way architecture is taught currently.

The Journal of Architectural Education 1947-2018

This chapter is made up of my reading of 27 articles on design studio pedagogy published in the *Journal of Architectural Education*. The complete list of these articles is found as a part of my bibliography. My approach to this review is delineated in the section *Navigating the Literature*.

The Scarceness of Relevant Literature

It is remarkable that, given the name of the *Journal of Architectural Education*, throughout the years only two articles have the word "evaluation" in their title and actually discuss student evaluation (both very brief articles). Out of the articles referenced in this chapter, the major-

ity only deal with the evaluation of architecture students secondarily. Even those focusing mainly on the evaluation of students put almost all of their focus on discussing the final critique and jury system.

As my reading would prove, this impression is not mine alone, with several researchers noting the apparent scarcity of writing on the subject of the design studio altogether (Ochsner, 2000, 194; Anthony, 1987, 3). Yet, it seems clear that the pedagogical model of the design studio and the model of evaluating students have been and still remain in use in virtually all architecture programs around the world in a relatively consistent form (Webster, 2007, 26; Groat & Ahrentzen, 1996, 166). It seems that architects, in fact, have little basis for answering even the most basic questions about design studio teaching (Ochsner, 2000, 194).

A Rough History of the Discussion

Up until 1983, when Donald Schön published his book *The Reflective Practitioner*, only varied texts about design studio teaching or the evaluation of students were published in the JAE. Apart from these writings being generally critical towards the prevalent model of studio education and evaluation, one key sentiment to pick up from these texts may be a concern about the lack of research produced by architecture faculties. William Porter summarizes some of these concerns:

> "There is little tradition in schools of architecture for research... Much of the work done in architecture has not been cumulative in the sense that research is cumulative in other fields. When research is brought into the school, students from other fields may have to be imported to become the research assistants because the architecture students cannot do the work." (Porter, 1979, 4)

These sentiments are worth noting not only because my own critique addresses a lack of theory and structure within the field, which enables unsubstantiated pedagogical practices, but also because Schön's writing can be seen as a direct counterargument against these concerns. In 1984, Schön published an article in the JAE, *The Architectural Studio as an Exemplar of Education for Reflection-in-Action*, recounting the central points of *The Reflective Practitioner* that concerned architectural university education and most specifically the design studio. Schön begins by pointing out the growing crisis of confidence in professional knowledge (Schön, 1984, 2). However, instead of addressing the issue by way of change, Schön's solution was to turn the dilemma on its head. Instead of feeling inferior to other university faculties about not producing knowledge to the same degree, Schön argued that there was knowledge in practice (Schön, 1984, 3). In essence, Schön celebrated the way architecture was taught on design studio courses, provided a theoretical study that justified the model of education in many regards and emancipated many of the concerns scholars had about the architecture faculties' capacity to produce knowledge.

The impact of Schön's writing can be seen in that he is referenced in most articles on the subject of the design studio in the following decades of the JAE. Of his role as an emancipator of sorts of architectural design studio pedagogy also speaks the fact that he remains the only writer in the history of the JAE to have contributed with an article that somewhat comprehensively justifies the way architecture is taught on design studio courses.

The problem with Schön's writing, to put it roughly, is that while it certainly has substantial merits, it mostly only theorizes on how things are conducted at present and only focuses on problematizing the model very briefly. Schön's approach is understandable because he was mainly using the pedagogical model of the design studio as an exemplar of

his concept of reflection-in-action. His actual goal was not to develop architectural education. He mainly desired to frame the workings of a concept and the arguably pedagogically positive traits of the concept in optimal scenarios.

After a couple of years of Schön's article, the topic of student evaluation emerged for the first time heavily in the *Journal of Architectural Education* along with the writing of Kathryn Anthony. In an acutely relevant article from 1987, Anthony writes:

> "Although generations of architectural educators have relied on juries as the primary vehicle to evaluate their students' work, very few have taken a serious look at the jury system itself and its educational value to students in the design studio. In this respect, architectural education is almost light years behind most other academic fields where professionals have systematically evaluated and often modified traditional teaching techniques on a regular basis." (Anthony, 1987, 3)

Anthony continues by presenting the results of a large research project assessing the effectiveness of design juries in architectural education. The results indicate that the jury system is highly ineffective as a learning experience and overall, in most cases, is more of a pedagogically destructive method of evaluation above anything else (Anthony, 1987, 5-9). The study also concludes that the vast majority of the teachers and students questioned agree that the way architecture students are evaluated on design studio courses needs improvement (Anthony, 1987, 5). In her recommendations for improvement, Anthony suggests establishing clear evaluation criteria at the outset of a design project and requiring that written criticism be given to each student (Anthony, 1987, 10).

Anthony's subversive research is not the only writing in the JAE from 1987 onwards to criticize the model of evaluation on design studio courses in similar terms. Thomas Dutton (1987 & 89), Mark Frederickson (1990), Linda Groat & Sherry Ahrentzen (1996) and Helena Webster (2007) among a few others agree more or less completely with Anthony's work in their writing and research. However, most of these articles deal with the evaluation of students in a secondary manner and their conclusions and findings with regards to the evaluation are found only in the bulk of the text of another topic closely related to evaluation. For example, Frederickson's rather relevant article from 1990 focuses on the subtleties in the communication between participants in the final critique. While he provides many very insightful findings on the general evaluation of architecture students, the bulk of the text is a detailed analysis of interpersonal relations. It is also worth noting that grading in general or the actual procedure of evaluating student achievements on design studios for the purpose of grading them was barely dealt with at all in any of the articles that I could find. The reason for this may be that the final critique easily attracts all of the attention and criticism due to its uniqueness and public nature.

Several relevant articles also focused primarily on gender and racial bias concerns in the education. The articles by Kathryn Anthony (2002), Linda Groat & Sherry Ahrentzen (1996) and Mark Frederickson (1993) most importantly underscore the unfair treatment of females and minorities in design studio practices, apart from noting the deficiencies in the practices that all of the students may suffer from. Groat & Ahrentzen aptly summarize:

> "Clearly, the subjective and often negatively charged nature of architectural critiques is a problem perceived by many students, but our questionnaire data are also consistent with previous research

that found gender and racial differentiation in the jury process. Specifically, Mark Paul Frederickson has documented substantial bias in both the quality and quantity of jury commentary for both female and minority students. Similarly, Kathryn Anthony reports a relatively lower level of satisfaction among women with architectural education in general and juries in particular." (Groat & Ahrentzen, 1996, 175)

In another article, Ahrentzen & Anthony (1993) pose a radical question to the reader alongside a photograph of a design studio with female instructors and mostly female students:

"Is it possible to imagine an architecture school where roles are reversed – where most students and faculty are women? Unfortunately, this photo had to be staged." (Ahrentzen & Anthony, 1993, 25)

These quotes elaborate on the multifaceted nature of the challenges of design studio pedagogy. There is not simply one avenue to approach in critiquing the pedagogy.

Based on my reading of the *Journal of Architectural Education*, an overall conclusion to be made would be that Schön's way of characterizing the design studio remains canon all the while most practitioners within the field seem to acknowledge pedagogical problems with the model.

Schön's Justification of Design Studio Pedagogy

As mentioned, Schön justified his theorizing on the design studio by addressing what he called "a crisis of confidence in professional knowledge". By this, he referred to the dilemma that schools that are practical face when they venture into the realm of university learning where they are expected to produce new knowledge. Here Schön differentiated between the medical school as the prototype for a scientific research university with academic rigor and status and the visual arts and music schools where students learn primarily to make and perform through practice. Schön's desire was to re-examine this "bifurcated system of professional knowledge", validate the method of education of the practice-based professions and suggest how the scientific schools may, in fact, learn from a practical educational model. The architecture studio was Schön's choice for an example of education for artistry. (Schön, 1984, 2-3)

In his article, Schön quotes large parts of his own research in *The Reflective Practitioner* including bits of dialogue between a "studio master" and a student on design studios that have been underway for a couple of months. Through the dialogue pieces, Schön exemplifies how the students and studio masters in turn "reflect-in-action" when communicating in a language of talking and drawing simultaneously. The studio master guides the student in tackling the design problem, but, as Schön points out, also needs to consider the student's understanding and be an active reflective practitioner oneself. (Schön, 1984, 4-6)

Schön does recognize dilemmas and common problem situations in the education, although he only touches on them briefly. For example, he acknowledges that many students experience problems of "getting it". One student, describing the situation as "Kafkaesque", is quoted saying: "*You don't know where you are and have no basis for evaluation.*

You hang onto the inflection of the tone of voice in your crit to discover if something is really wrong (Schön, 1984, 5)." Schön describes the situation as a paradox of trying to find something that one does not know:

> "The design master cannot at first tell the student what the student needs to learn, because the student has at first no way of understanding what the design master means. Only as he or she immerses him or herself in the studio experience, the experience of trying to design, can he or she create the conditions in which to begin to understand what the studio master says and does. But this immersion carries, often, a perceived risk of a high order. Immersing oneself in the strange and demanding world of the studio, the student tends to experience a loss of competence, control, and confidence. And he or she cannot judge the value of taking such a risk until having actually taken it... This predicament is exacerbated, moreover, by the fact that studio master and student are trying to reach convergence of meaning in the face of the inherent vagueness, ambiguity, and, perhaps, inexpressibility in words, of notions central to architectural designing." (Schön, 1984, 6)

This quote may be regarded as an apt summary of Schön's thoughts and the sentiments that, in my experience, many studio teachers, as well as students, would likely share. At the same time, I believe it exemplifies the lack of depth in problematizing the studio model. On the one hand, the quote demonstrates how the procedure of the studio model is viewed and how its problematic nature is somewhat recognized, while on the other hand, it negates criticism by its subjects, the students, by requiring complete submission to an "immersion" before any "understanding" may be acquired. It is not far-fetched to compare these rhetorics to that of a religion saying "you may not know the

grace of God before you have, in your heart, surrendered yourself to the teachings of our religion." The method of teaching inherently involves similarly pressuring students to eventually conform to whatever teaching, likely suppressing the student's own voice, intellectual curiosity and critical thinking.

Schön does not question the model very deeply, nor was this in his interest. In a book review in the JAE of Schön's 1985 publication, *The Design Studio: An Exploration of its Traditions and Potential*, Thomas Dutton and Laura Willenbrock provide insightful criticisms along these lines. In response to Schön's notion of immersion into the studio culture, Dutton & Willenbrock fear that this may increase dependency on authority and muffle critical thinking among students: "*It is likely that what students will learn is their professor's language or their frames of reference, rather than understand and construct their own*." Dutton & Willenbrock find no challenging of the teacher, or encouragements to challenge in the written dialogues analyzed by Schön. The student, subordinate to their studio "master", is essentially paralyzed with seemingly no volition of their own. In the reviewers' reading, Schön's theoretical mistake is not including any analysis of power as a factor between the studio master and student:

> "If the subject of power is not central to analysis, what gets lost is the responsibility of teachers to develop pedagogies that facilitate students getting in touch with their own frames of reference. Failing this runs the risk of discounting students' experiences and subjectivities, of displacing what students find of value and meaning in their lives. As a starting point, professors have to take seriously the knowledge base of students, as well as their values, visions, sentiments and history." (Dutton & Willenbrock, 1989, 53-55)

Anthony's Criticism of the Field's "Sacred Cow"

If Schön may be seen as the first (and only) proponent of the design studio model to provide a somewhat comprehensive analysis of its merits and inner workings in the JAE, Kathryn Anthony may be seen as the first critic of the model to provide a widely substantiated critique on it in the journal. Considering Anthony's three articles related to the subject in the JAE (1987, 1993 and 2002) and her published books *Design Juries on Trial: The Renaissance of the Design Studio* (1991) and *Designing for Diversity: Gender, Race and Ethnicity in the Architectural Profession* (2001) she may even be the most prolific researcher on the subject overall. While Schön's focus was very much the "idea" of the design studio, Anthony's approach has been very much to reveal all of its unspoken negative tendencies. This is, in my view, reflected in the fact that, in Schön's writing, the evaluation of students is barely dealt with at all while Anthony's work centers on challenging what she calls one of the field's most "*sacred cows*", the design jury system. Her goal: creating "*a more humane academic environment that would ultimately benefit the profession*" (Anthony, 2002, 257).

Perhaps most importantly, Anthony took the approach of collecting information from the most relevant source: the students. In her research published in 1987, she presents a study conducted over the course of one academic year, including systematic behavioral observations on 130 student presentations at jury sessions, interviews with students at different phases of their courses, including interviews with students immediately after receiving criticism from jurors, diaries of 27 students and questionnaires answered by 180 architecture students. (Anthony, 1987, 4)

Results showed that a minimal level of learning about design occurred at best in final reviews. Instead, the learning experience had often more to do with learning how to "*play the game*". Here Anthony quotes one fourth-year student after a crit who claimed to have learned "*to be patient, modest, courteous, to keep my talking to the bare minimum, not to be 'braggish' or unduly 'meek', and to dress effectively*". The diaries did reveal that students regarded highly any positive criticism they would receive for their presentations, but that positive criticism wasn't given enough. The majority of the emotions described by the students about jury reviews were "*strikingly negative*." Anxiety, fear, frustration, anger, embarrassment, disappointment, guilt, and disgust were the most frequently felt emotions. Surprisingly, the students weren't alone critical to the jury system with faculty and alumni agreeing in similar numbers that the system is inadequate and in need of improvement. Also, both faculty an alumni that were surveyed concurred by over 75% that student presentations at juries and professional presentations to clients are either somewhat or very different from each other. (Anthony, 1987, 5-9)

Several more pages could be filled with similar, acutely critical findings made by Anthony. Her articles from 1993 and 2002 further expand on these issues by specifically focusing on the aforementioned gender and racial issues in the educational model. In her book, *Design Juries on Trial: The Renaissance of the Design Studio*, she also extends the scope of her source material to include interviews and surveys of more than nine hundred faculty and students from 92 different schools (Ahrentzen & Anthony, 1993, 16; Anthony, 2002, 257).

To sum up some of her closing thoughts, Anthony remarks how "*psychologists and learning theorists have long demonstrated the educational value of positive reinforcement; in this regard we architectural educators have a lot to learn*" (Anthony,1987, 9). She does not, however, completely dismiss the design jury, but instead provides a list of recommendations on how to improve the practice of evaluating architects on studio courses (Anthony, 1987, 10-11).

Supportive Accounts of the Design Studio Model

To my own surprise, articles in the JAE that professed support for the prevalent design studio model in one way or the other were very difficult to find in my search. The perhaps most likely reason for the lack of such texts is that the model is so ingrained in the professional consciousness of the field that the need for any support for it to be professed in an academic journal is unnecessary. Promoting a theory or some thinking that may already seem established may, of course, seem useless. Considering Kathryn Anthony's research, the lack of supportive writing on the design studio model should perhaps not be surprising given that her findings revealed that the vast majority of the practitioners in the field thought that the jury system (perhaps the most defining characteristic of the design studio) needs improvement.

Apart from Schön's writing, supportive views of the model could mostly be read through the lines in articles that could perhaps best be described as neutral; not acknowledging that there is a problem may, perhaps, indicate that the writer likes the way things are. For example, in an brief article encouraging the use of student group working in studios as a vehicle for learning through criticism from peers, Raymond Lifchez also chronicles the general idea of teaching architecture to students through criticism on studios:

> "If criticism as a process is successful, it lessens, over time, the natural dependency of the student on the critic... Once assumptions and values are clarified, criticism may begin... In his choice, the student may risk giving something up for something yet untried, which is the process of learning. If there is a previous understanding and respect between student and critic, the risk will be more readily acceptable to the student." (Lifchez, 1976, 4)

Even here, Lifchez chooses his words carefully and emphasizes the need for a previous understanding between student and critic before fruitful criticism may be given.

Some otherwise critical texts also theorized on the issues of the traditional studio in partially supportive passages. Echoing many of Donald Schön's thoughts, Stefani Ledewitz, for example, elaborates on why the content of teaching on studio courses may not be made more explicit. In her view three basic aspects of design education are taught primarily in the design studio: skills such as visualization and representation, "*a graphic and verbal language game*" described by Schön and "*architectural thinking*," referring to an ability to recognize problems and solutions that characterize professional performance. Ledewitz concludes:

> "In teaching studio, therefore, it is both difficult and ineffective to isolate these aspects of design education. This complicates the formulation of explicit teaching objectives. And for this reason, the attempt to articulate such objectives often seems artificial and perhaps even contrary to the ultimate purposes of the studio." (Ledewitz, 1985, 2)

The rest of Ledewitz's article, however, consists of thoughtful theorizing on how to, in fact, better convey teaching objectives by restructuring the educational model on studios.

Even some of the most critical articles acknowledged some positive traits in the practices they criticized. Kathryn Anthony, for example, recognizes that preparing for the final review may be a rather effective learning experience and that the experience of the jury socializes the students to the culture of architecture. (Anthony, 1987, 10) Groat and Ahrentzen also acknowledge that the intense work carried out together in design studios may instill a strong sense of community among the

students. When the environment functions well it may be a very supportive experience that is highly appreciated by the students. (Groat & Ahrentzen, 1996, 170)

The Principle of the Masterschool

Articles explicitly siding with the traditional design studio were not completely absent in the JAE, however. In a rare, unambiguously supportive, article coming from an actual educator in the field, Gustav Peichl talks about the principle of the "*masterschool*". Peichl's article is brief, but plainly honest, beginning with the fact that the word "master" is included in the concept of the *Meisterschulprinzip* that he refers to in presenting the educational practices at the school in Vienna. In a large sense, Peichl's descriptions of the *Meisterschulprinzip* also apply to the traditional concept of the design studio. In his words, the principle, institutionalized when founding the Vienna Academy in 1872, involves centering the education of one fine art discipline on one teacher:

> "The *Meisterschulprinzip* regards the design teacher (*Meisterschulleiter*) as the principal figure in architectural education. This teacher's personality defines the priorities and it is due to his or her abilities that architectural education reflects his or her personal and subjective charisma." (Peichl, 1987, 55)

In practice, the only difference between this concept and the approach on a traditional design studio may be that, on a studio, the focus on the teacher as the principal figure in the education may be implicit or unexpressed. Peichl, on the other hand, expressly acknowledges that the role of the teacher is that of a master. Quoting a former Vienna colleague, Otto Wagner, Peichl concludes:

> "It is part of the constitution of the Academy of Fine Arts, that each design teacher can reject the application of the student's work which does not conform to the expected standards of the artistic level." (Peichl, 1987, 56)

Provided that the students are in on the deal of essentially accepting to be shaped by a master, I don't believe that this concept is problematic. As long as the education is candid about its intentions and the students know what to expect, one cannot criticize the education for following through with its promises. The case is altogether different if the education promises to support the students in growing into designers with their own singular voices. According to Peichl, all fine arts teachers at the academy support the principle of the masterschool. Peichl even logically notes that it is recommendable for students to take all of their design studios with the same *Meisterschulleiter* (ie. teacher) to be able to easily evaluate their progress throughout the years. Without a doubt, student evaluation in such a scenario would be a significantly more straightforward procedure. (Peichl, 1987, 55-56)

Criticisms of the Design Studio Model

One of the first critical writings in the JAE to consider the well-being of architecture students would be a text of a talk held by the psychologist Dr. Leif Braaten. Braaten, having worked as a counselor and psychotherapist with architecture students provides examples of common problems architecture students deal with. Quoting some of his clients anonymously, several of the accounts are closely connected to the same problems other writers would bring up later: "*I feel my entire existence consists of very clever acting on my part. It's not that I can't find the real me – it's that there isn't one*." "*I am tired due to a too heavy workload. One*

course tended to give me headaches and stomach pains." "*I prefer to take the easy way out and have others make decisions for me*." (Braaten, 1964, 5-8)

In a very brief article from 1974 titled, *A Framework for Communication and Evaluation in Architectural Education*, Professor Charles Burnette provides one of the first (and few) explicit critiques on the evaluation of architects in the JAE. His article also remains one of the only two articles in the history of the JAE to include the word "evaluation" in their title and actually discuss student evaluation. The other one of these two articles is one that I did not consider very relevant since it only contained, in my view, vague and primitive hand-drawn images and notes for evaluation forms. These rough studies may be found in the article *Course Handouts; Studies for Student/ Course-Critic Joint Evaluation Forms* (1973) produced by Robert Mather. Burnette's article is also very brief, but rigorously straightforward. In outlining the problem focus for his article, Burnette touches on the exact issues primarily dealt with in my thesis as well. These words were, however, written over four decades ago:

> "Architectural education has been plagued by subjective, undifferentiated and typically negative forms of evaluative communication inherited from the jury system, reinforced by the conception of the architect as a renaissance man, and worsened by the lack of theory and structure within the discipline. As a consequence students often are unable to identify their aptitudes or their relative weaknesses with any particularity. There is no reference framework to clarify communication and understand between faculty and student and no system for differentiating grades or assisting career counseling." (Burnette, 1974, 19)

Many of the most relevant writings in my search focused on the final review. Agreeing with Anthony's research, Mark Frederickson's 1990 study and article, *Design Juries: A Study in the Lines of Communication*, expands further on the same issues. Like Anthony, Frederickson concludes that final reviews rarely come even close of operating at their full potential with regards to supporting students in their education. As Frederickson notes, one problem is that fault-finding is an almost instinctive aspect of human nature. Accordingly, critics often focus their efforts on finding errors in the students' works without even giving them a fair chance. The students, again, have little chance of defending themselves due to the powerful leverage the jury has over the students in the form of grades and the approval or disapproval of the students' performances. The convention of critiquing the students' in front of the whole class, ie. the students' peers, makes the passing of judgment on the students even more damning for the individual. Frederickson further notes that final juries would require effective leadership for them to function properly, but that productively leading a review requires significant pedagogical competence. Unskilled leaders may unwittingly end up misusing their position to promote their own agendas. Obvious manipulations may often be masked in seemingly polite language. Other tendencies by jurors may involve flattery and showing-off to prominent members of the jury, rivalry in trying to be the one to find mistakes and alienating the student audience from taking part in the review in an active role. (Frederickson, 1990, 22-26)

The most recent notable article on the design jury in the JAE is Helena Webster's 2007 article *The Analytics of Power*, presenting the findings of a year-long ethnographic study. Webster concludes that while the final review was seen as a valued ritual by the students and

teachers it had the effect of "*objectifying a power differential between critic and student and that this asymmetry of power profoundly distorted the pedagogic outcomes*." The article identifies some key tendencies in the periodicity, constituency, spatiality, choreography, and language of the design jury that serve what Webster calls a "*staging of power*" between the students and critics. These tendencies often reduced the students to passive listeners who rather focused their efforts on getting through the review without "*getting killed*". Student interviews revealed that students often faked agreement with the critics' comments. While the stereotypically negative view of the critic as someone primarily focused on promoting their own agendas was not consistently true in Webster's findings, she does remark that most critics did function in this role at least some of the time (especially when reviewing "weaker" students). The model of the critic acting as a "*hegemonic overlord*" was also more common than that of a caring pedagogue. In her conclusions, Webster suggests getting rid of the practice of the design jury altogether in exchange for completely other, pedagogically more sound practices. (Webster, 2007, 21-26)

The Pedagogic Environment

Several writers throughout the years also critiqued other aspects of the pedagogic environment of the design studio. Beginning with the vagueness of course descriptions that may often seem "*about as reliable a form of communication as political campaign speeches*" (Berkeley, 1976, 1) to the destructive tendencies of the design studio's "*hidden curriculum*" (ie. implicit lessons) that "*actually counter what might be normally considered as sound teaching practice*" (Dutton, 1987, 16), it appears that there are many avenues to approach in critiquing the studio system. According to David Evan Glasser, a longtime architectural educator, the idea of the design studio is to provide an environment for the students where abilities and artistry are put into use in the spirit of open inquiry. Glasser's observation is, however, "*that most programs find it convenient to promulgate a set of ideologies, overtly or subliminally, to their students, often stultifying individual inquiry as well as intellectual and artistic development*." (Glasser, 2000, 250)

C. Greig Crysler describes how students are commonly regarded as passive "*empty vessels*" in the education, "*removed from social and political forces*." Their role is, implicitly, to receive "*transmissions of skills and information as delineated by experts*." Accordingly, Crysler notes how some have called it the "*transmission model*" of pedagogy. Referencing a report by an *Architecture Review Committee* (*ARC*), established to investigate sexual harassment and psychological abuse complaints at an architecture school in the United States, Crysler remarks how the report's description of the pedagogic environment at the school is comparable to that of a "*total institution*" conceived by Erving Goffman. While the report was, in its time, criticized for not including any actual architects in its research team, Crysler, having been educated in two architecture schools, also remarks how the findings on the education made by "*outsiders*" are striking due to their familiarity rather than their peculiarity. According to Crysler, "*it is clear that the practices criticized are commonplace throughout architectural education*." Among other things, the report described how students learned to focus almost all of their efforts on their studio projects to the extent of neglecting personal hygiene, diet and outside social relationships. The school created a restricted reality where support from inside the small community was intensely sought. (Crysler, 1995, 208-210)

Garry Stevens, writing from the University of Sydney, expands further on the means used to create this social reality. In his words, there are three ways to enculturate the students into their state of "*docile*

acceptance" in architectural education. Firstly, the students' time is controlled with the design studio. According to Stevens "*Design studio may represent some 70 percent of their [the students'] credit hours, but it consumes 90 percent of their time*." Secondly, vague, suggestive and mysterious language is used in the studio, which "*requires students to struggle to wring meaning, to worry about whether they have understood, to frantically hope they will please*." Thirdly, intense competition between students is encouraged. Through competition, the students focus their efforts on competing with each other, on "*playing the game*," rather than on questioning authorities. Contrarily, students end up competing for acceptance from their teachers. (Stevens, 1995, 116-119)

In their study on gender and racial issues in the education, Linda Groat and Sherry Ahrentzen substantiate many of these same issues. Groat and Ahrentzen also observe from their survey findings, including responses from 642 students from 6 architecture schools, that the responses from different sample groups and from school to school were highly consistent. In their findings, many students voiced especially acute worries about the negative effect of the competition on studio courses. The authors quote one female student saying "*I think that students are in effect pitted against each other in competition for whatever rewards there are... It's like [professors] try to set up a hierarchy among the students... And they think that encourages people to do more work because if there's something to shoot for they'll do it*." On the other hand, Groat and Ahrentzen also acknowledge that some students appreciated the competition, viewing the competition as healthy with everyone competing to find the "*best possible design*". Similarly, while many students greatly appreciated their relationships with their studio professors and teachers, other students voiced deep frustration with the master-apprentice quality of the education and vague, suggestive and mysterious language commonly used to direct the students. (Groat & Ahrentzen, 1996, 166-170)

Resistance to Change

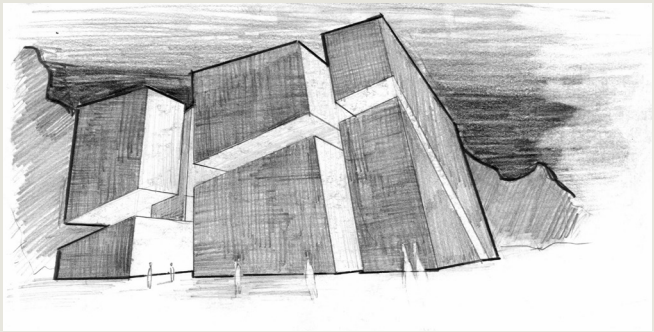
Several authors throughout the years also speculated on the reasons for why no change in the pedagogical practices of the design studio have occurred despite that the consensus has often seemed to be that the model needs development. Donlyn Lyndon quotes an anonymous source in providing one angle for an answer: "*The trouble with architects is that when they try to think about architectural education all they can do is to think about what their own education was like*" (Lyndon, 1978, 2). Indeed, architects themselves seem to be a popular target for the blame. As C. Greig Crysler puts it, many architects believe that in order to understand the subtleties of the education one needs to have been trained as an architect. Only architects are thus competent to form any judgments of the education. (Crysler, 1995, 209) This type of thinking is also reflected in that the teachers and tutors on design studios are usually exclusively architects themselves. The scarcity of literature on design studio instruction also suggests that the popular conception is that in order to become a design studio instructor the first and foremost criteria is to have been educated as an architecture student oneself. (Ochsner, 2000, 194-195) David Evan Glasser observes that it is not an overstatement to say "*that few, if any, faculty enter the teaching ranks prepared to function as educators, as distinct from professionals*." In other words, most architectural educators know very little about pedagogy. (Glasser, 2000, 250) Can change then be achieved if the only pedagogical models that studio instructors adhere to are the ones they themselves have experienced as students?

In an article from 1963, an anonymous author also makes a point about how student works and success are a prestige matter for architecture schools: "*The real fear is that the sub-marginal students will create the impression* outside *the school that its standards are low, and that the*

staff and talented students will lose prestige therefor." (Anonymous, 1963, 97) In practice, architecture schools may be pressured to keep up with a certain standard so as not to hurt the prestige of the school. Teachers, in other words, may feel compelled to "produce" architectural works with the students that conform to a certain standard. The fear may be that letting the students do too much of their own thing will result in more sub-par works that will reflect poorly on the school and eventually put the teachers' jobs in danger. Pitting students against each other in competition on studio courses may also be seen as a vehicle for keeping the standards of the school as high as possible. Since all other schools employ the same methods, implicitly or not, jumping off the bandwagon may seem risky. Architecture schools may fear that perceived from the outside, the quality of their education may seem to suddenly plummet if the students weren't, in effect, pitted against each other in competition anymore. Of course, these relations also work on the individual level and to the benefit of the students as well. C. Greig Crysler observes: "*Whereas a novice architect can add luster to his or her credentials through association with a famous teacher, that teacher's reputation is legitimized through the production of students that the profession deems masterful*" (Crysler, 1995, 211). David Evan Glasser also observes from his own experience how architecture faculties are tradition-driven. Promotion and tenure of scholars may only be obtained by accepting the basic educational approach. Few young professors, in his words, have it in them to challenge the established ideologies regarding their programs:

> "Architecture faculty... by and large, appear to prefer personalities that will minimize demands upon them and, if possible, maintain the status quo ante. Unless programs find themselves in crisis, most are prepared to continue current practices indefinitely, without critical self-examination." (Glasser, 2000, 251)

4 Data



Student Survey Findings

Overall Remarks

The results of the Finnish students reflect my own concerns about the vague evaluation methods on design studio courses to a large degree. While the results cannot be generalized, they do clearly indicate that I am not as alone with my concerns as I might have thought.

The results of the exchange students, in general, differ from the Finnish students' results rather significantly in that the exchange students appear more approving of the model of evaluation on design studio courses. Although some of the results may arguably vary within the margin of error, the difference in attitudes towards the education and evaluation is consistent in the answers.

It should also be noted that the results of each of the five separate surveys were more or less in line with each other (see attachment 3).

Reasons for the Different Results of the Two Groups

As recognized earlier, the group of exchange students represents an especially narrow sample in terms of their background, given that they were surveyed while being students at Aalto University. For one, being ”guests” of sorts at the university may incline them to be overly courteous in providing criticism on university issues. Furthermore, having experiences of student evaluation from at least two universities and supposing that these experiences have been similar in terms of quality, the exchange students may be inclined to regard their experiences as representative of a common standard among universities. This may incline them to be less critical in answering a survey conducted at one of the universities. The Finnish students, on the other hand, being on their home turf and mainly relating their experiences to their own expectations may be less hindered in providing criticism.

Alternatively, assuming that the quality of the evaluation was better at Aalto than at the exchange students' home universities, the exchange students may have been inclined to answer extra positively to a survey conducted at Aalto University.

Of course, cultural differences may also play a part. Finnish people may, in general, be more critical or demanding towards such things as the quality of education than other people. Some students from abroad may also be paying high tuition fees, which Finnish students don't have to pay. This may have an unforeseeable psychological effect on the students. Lastly, the English language barrier may also affect the results. Most of the exchange students only speak English as their second language and although there were explanations attached to each question

of the survey, some students may still have found it difficult to relate to the questions. This may have prompted them to answer less critically than someone not having to consider the language too much.

Background Information

Gender distribution: 17 of the Finnish students were female and 14 were male. 1 Finnish student did not wish to answer the question (choice) and 1 student left the field blank. 16 of the exchange students were female and 12 were male. 2 exchange students left the field blank.

Age & years studied: The average age of the Finnish respondents was 26,44 years and the average age of the exchange students 26,40 years. The Finnish students had studied for an average of 5,06 years and the exchange students for an average of 5,36 years.

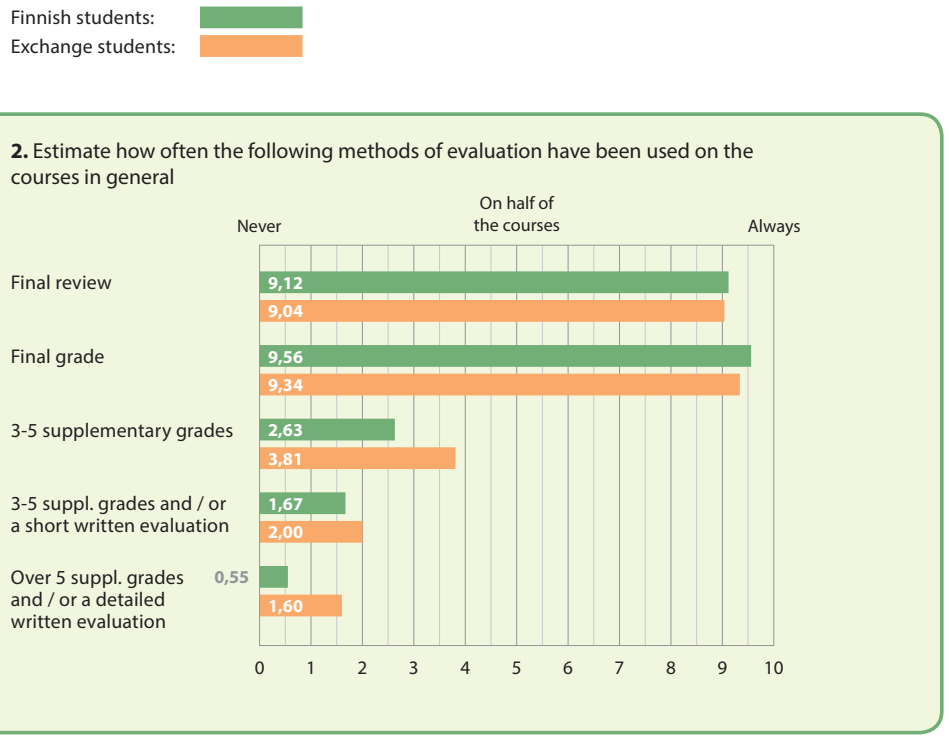
Bachelor's degree: 5 Finnish respondents had not completed their bachelor's degree. However, only two of these had not participated in any master's level studio courses. All of the of the exchange students surveyed had completed their bachelor's degree.

Master's level studio courses: The Finnish respondents had participated in an average of 2,59 master's level studio courses of which they considered that 2,23 had had a design focus. The exchange students had participated in an average of 2,36 master's level studio courses of which they considered that 1,97 had had a design focus.

Question 2: Estimate how often the following methods of evaluation have been used on the courses in general.

The answers to question two support my own experiences and the notion that the final review combined with a final grade remains the clearly most common way in which architecture students are evaluated on design studio courses. The Finnish and exchange students' results with regards to the prevalence of the final review and final grade are also almost equivalent to each other. The exchange students appear to have had slightly more experience with receiving supplementary grades and/or written feedback on their courses, however. While the Finnish students' results indicate that 3-5 supplementary grades have been provided on roughly one out of four design studio courses, detailed written evaluations and/or over 5 supplementary grades appear to have been provided almost never to the students.

The exchange students also reported relatively small differences with the student evaluation on design studio courses at their home university compared to Aalto University. Six exchange students left the designated field empty. Twelve students reported no significant differences, although a few of these noted that they received either slightly less or more feedback at Aalto University and that the course requirements at Aalto University were either less or more demanding. Six students reported no differences apart from that the grading system in their home universities differed from the 0-5 scale, which is in use at Aalto University. One out of these students reported that they only receive a pass or fail for their courses. Five students reported that they have extra



midterm reviews at their home universities. Four of these students also noted that they receive midterm grades at these reviews. One student reported that they are evaluated almost every week on a five-letter scale at their home university and receive a final grade on a scale from 1-7.

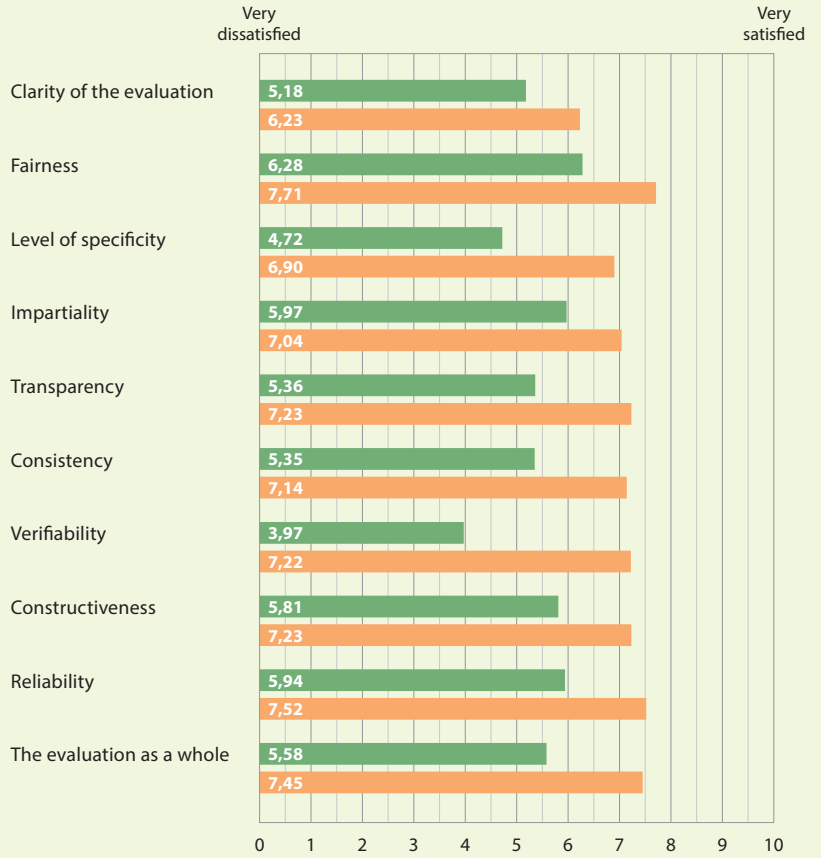
Qualities of the Evaluation

Question 3: Please rate your overall satisfaction with the following qualities of the course evaluation practices.

As can be seen in the results for question 3, the Finnish students appear rather critical towards the evaluation methods. Most significantly, the scores for the level of specificity (*tarkkuustaso*) and the verifiability (*tarkistettavuus*) of the evaluation methods are low (4,72/10 and 3,97/10 respectively). This also supports my own concerns given that much of my own writing focuses especially on the lack of specificity of the evaluation and the student's position of not being able to determine the basis for one's evaluation (ie. verify it). The only quality to receive a result over 6/10 from the Finnish students is the fairness (*oikeudenmukaisuus*) of the evaluation with a score of 6,28/10. The rest of the Finnish students' results for the different qualities of the evaluation vary within 5-6/10. These are the clarity (5,18/10 [*selkeys*], impartiality (5,97/10 [*tasapuolisuus*]), transparency (5,36/10 [*avoimuus*]), consistency (5,35/10 [*johdonmukaisuus*]), constructiveness (5,81/10 [*kehittävyys*]) and reliability (5,94/10 [*luotettavuus*]) of the evaluation. The Finnish students' rating for the evaluation as a whole (*arvostelu kokonaisuutena*) was also 5,58/10. Considering that the student satisfaction of course evaluation practices is a metric that should, optimally, be as high as possible, these results seem acutely concerning to me.

The results of the exchange students, on the other hand, are significantly higher than the Finnish students' results across the board. In fact, all of the exchange students' results vary within 6,90-7,71/10, excluding the metric for the clarity of the evaluation, which was 6,23/10. Still, each of the exchange students' results tops the Finnish students' results with at least 1,07 (impartiality) and at the most by 3,25 (ver-

3. Please rate your overall satisfaction with the following qualities of the course evaluation practices



ifiability). The exchange students' satisfaction for the evaluation as a whole was also 7,45/10 compared to the Finnish students' 5,58/10. It should be noted, however, that a result of 7,45/10 may still be regarded as a rather critical score. The relatively even results of the exchange students may, however, be seen as a symptom of the students either not

paying too much attention to differentiating each of the qualities to themselves or not understanding the subtle distinctions between the English-language words. The significant difference between the Finnish and exchange students' results for the verifiability (*tarkistettavuus*) of the evaluation practices also raises the question of whether the translation of the word has made the different groups of students relate to that specific metric differently. Nonetheless, the exchange students' results do provide some valuable perspective on the Finnish students' results in that they indicate how differently the questionnaire may be answered by two different groups of students.

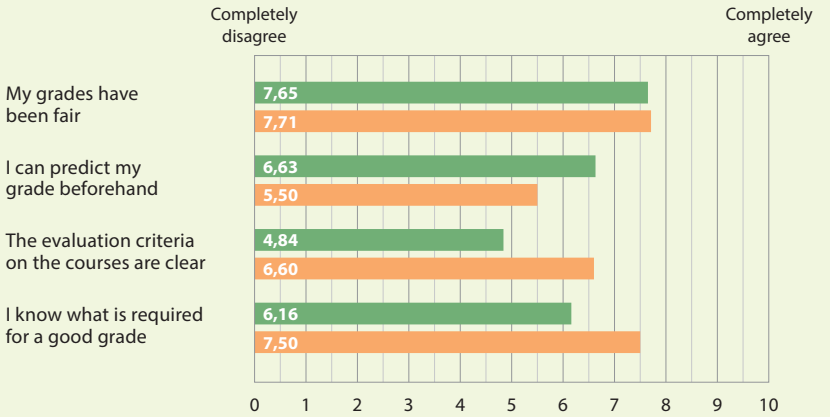
Grading and Evaluation Criteria

Question 4: To what extent do you agree with the following statements.

In question 4, the Finnish students provide comparably higher results for the statements "*my grades have been fair*" (7,65/10) and "*I can predict my grade beforehand*" (6,63/10). This also supports my own experiences and supposition that the issue with the evaluation is not as much about the accuracy of the eventual final grades as it is about receiving an evaluation that is properly substantiated. Of course, a score of 7,65/10 does not appear particularly high either, which indicates a noteworthy dissatisfaction among students of their course grades as well. Regarding the statement "*the evaluation criteria on the courses are clear*," the Finnish students' then again provide another considerably critical result of 4,84/10. Again, this result also reflects my concerns about the lack of proper evaluation criteria. For the final statement in question 4, "*I know what is required for a good grade*," the Finnish students provide a 6,16/10.

It is noteworthy that the exchange students' result (7,71/10) for

4. To what extent do you agree with the following statements

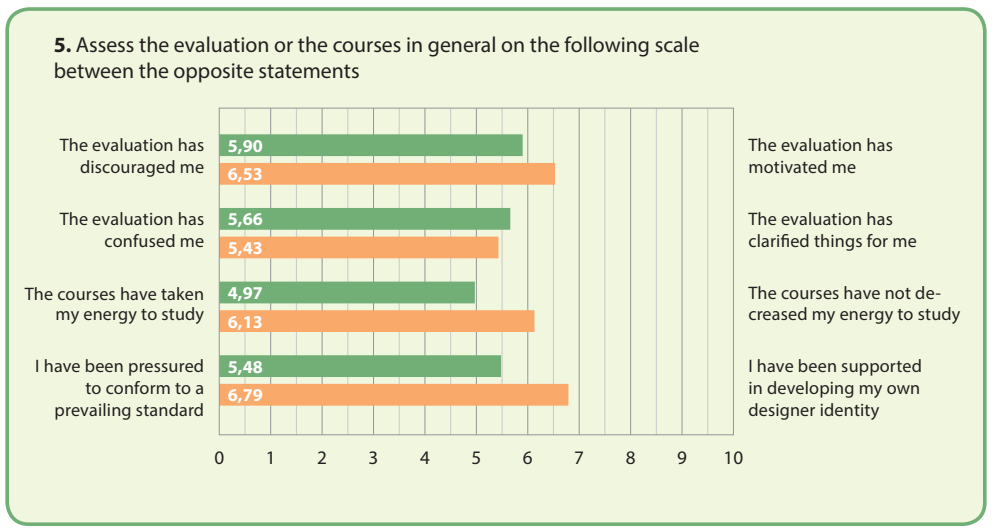


the statement "*my grades have been fair*" is, in practice, equivalent with the Finnish students' result. Furthermore, the exchange students' result (5,50/10) for the statement "*I can predict my grade beforehand*" is significantly lower than the Finnish students' result for that metric. This contrasts the exchange students' results in question 3 starkly and indicates that the discrepancies between the Finnish and exchange students' answers are, in fact, due to differences in attitudes rather than in the understanding of the questionnaire. In other words, the results may indicate that the exchange students' are equally (if not more) unsure of the evaluation as the Finnish students', but that they still appreciate or revere it more. Correspondingly, in the statement "*the evaluation criteria on the courses are clear*," the exchange students' result bounces back to a relatively high 6,60/10 compared to the Finnish students' result for that metric. It should, however, be noted here also that a result of 6,60/10 may be seen as a rather critical result as well. Lastly, the exchange students provide a 7,50/10 for the statement "*I know what is required for a good grade*."

Some Effects of the Evaluation and Education

Question 5: Assess the evaluation or the courses in general on the following scale between the opposite statements.

In question 5, some effects of the evaluation and education are surveyed. Again, the Finnish students' answers are, overall, more critical to the education. In the first measure (*The evaluation has discouraged me – The evaluation has motivated me*), the Finnish students provide a result of 5,90/10 while the exchange students provide an only slightly higher result of 6,53/10. In the second measure (*The evaluation has confused me – The evaluation has clarified things for me*), both groups provide critical results that are, in practice, equivalent (5,66/10 compared to 5,43/10). This supports the aforementioned assumption that the exchange students may, in general, experience the evaluation similarly, but that they still remain more appreciative of it. In the third measure (*The courses have taken my energy to study – The courses have not decreased my energy to study*), the Finnish students' result (4,97/10) is, again, considerably low. While the exchange students' result for the same metric is clearly higher (6,13/10), it too may be seen as a rather critical score. Finally, in the fourth measure (*I have been pressured to conform to a prevailing standard – I have been supported in developing my own designer identity*), the Finnish students provide another low result (5,48/10) while the exchange students provide another clearly higher score (6,79/10). These results may indicate that the effects of the issues of the evaluation aren't, indeed, limited only to the realm of the evaluation, but that a poor evaluation may have implications to other areas of the education.

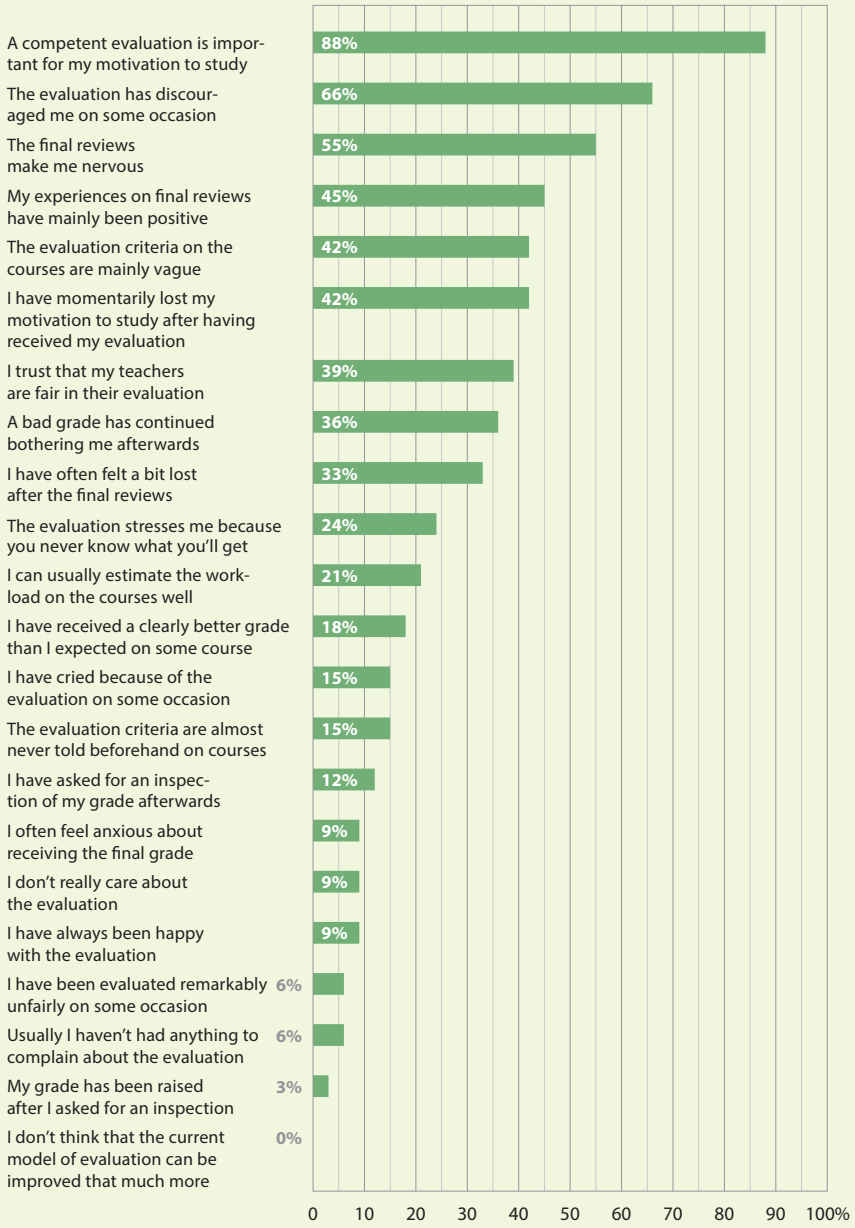


Different Statements

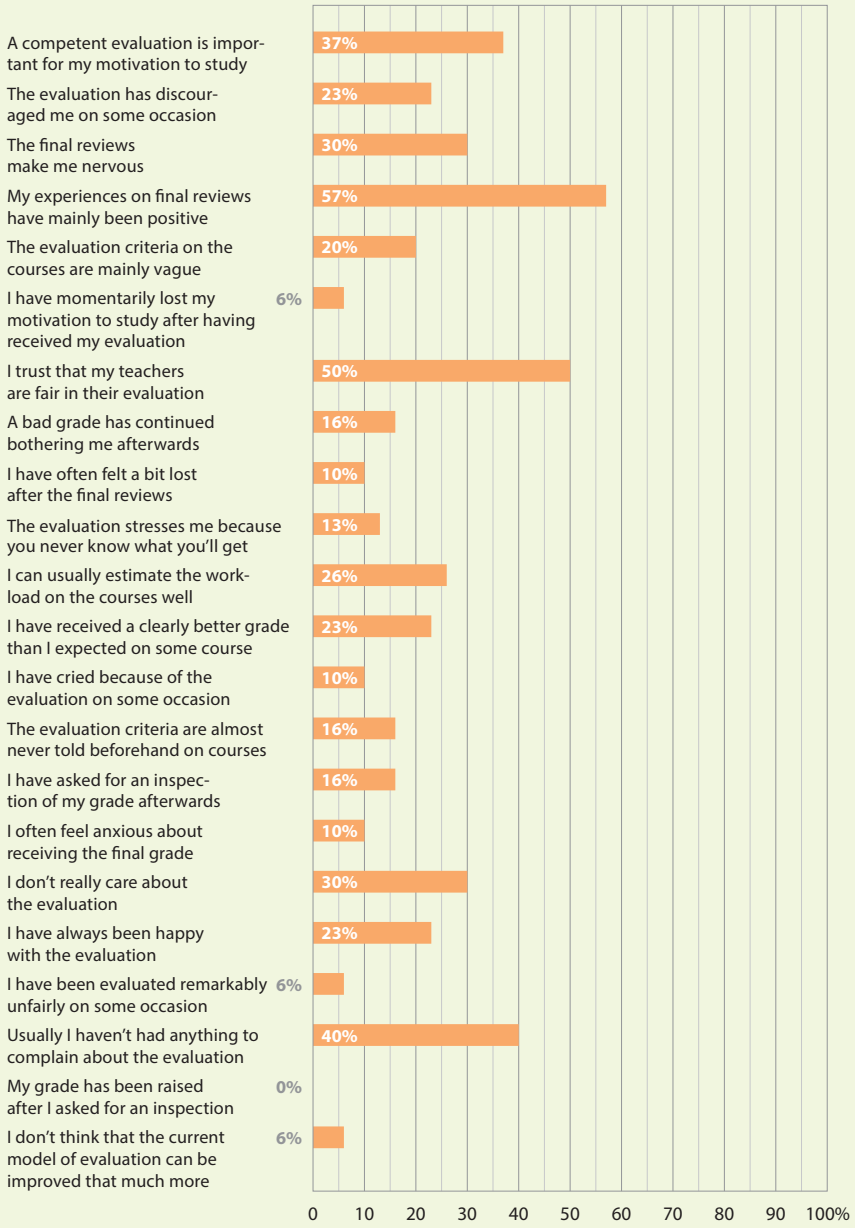
Question 6: Which of the following statements best describe your experiences on the courses? You can select as many options as you consider correct.

In the sixth and final question box of the survey (on the following two pages) students were asked to checkmark statements that applied to themselves among 22 choices. I have organized the Finnish students' results in a descending order based on the popularity of each of the choices. The percentage for each statement indicates how many students of the group checkmarked that statement. The exchange students' results are organized in the same succession as the Finnish students' results in order for it to be easy to compare the results between the two groups. The results and choices by separate students may also be looked at in attachment 3.

6. Which of the following statements best describe your experiences on the courses? You can select as many options as you consider correct.



6. Which of the following statements best describe your experiences on the courses? You can select as many options as you consider correct.



I should also acknowledge the nature of the question format and how most students appeared to relate to the task of checkmarking statements among a large number of choices. By looking at the answers table of attachment 3, it is clear that most students only went for selecting a few of their favorite statements instead of checkmarking all that applied to them. This is perhaps not a surprising reaction by the respondents considering that it may seem redundant to checkmark several of the 22 statements. In hindsight, this may also have to do with the usage of the word "best" in the formulation of the question. Although the question specifies that "you can select as many options as you consider correct," the question before that speaks of statements that best describe the students' experiences on the courses. Leaving out the word "best" may have prompted the students to checkmark more statements. Nonetheless, the goal of the question was to acquire information about the most popular statements. Even without using the word "best" in the formulation of the question, the answers could have still only been considered as a reflection of the most popular statements, given the relatively large amount of choices. A different amount of choices and different statements would likely garner rather different results among the same groups of students. In other words, the answers in box six are mainly relevant when looked at in relation to one another. Making definitive conclusions about the actual number of students in the groups to which certain statements apply should thus be avoided.

The Finnish students' clearly most popular statement was "*A competent evaluation is important for my motivation to study*" with 88% of the students picking that statement. In the other end of the spectrum, the Finnish students' least popular statement was "*I don't think that the current model of evaluation can be improved that much more*" with none of the students choosing that statement. Coming in second in popularity was the statement "*The evaluation has discouraged me on some occasion*"

with 66% and third "*The final reviews make me nervous*" with 55%. The fourth most popular statement was "*My experiences on final reviews have mainly been positive*" with 45% of the students picking that statement. Furthermore, the seventh most popular statement was "*I trust that my teachers are fair in their evaluation*" with 39% of the students choosing that statement. The relative popularity of these two statements that are appreciative of parts of the education and evaluation serves to underscore that the issues with the education are not black and white. This also supports my own experiences of other students' appreciation of the education and I might have picked these two statements myself as well. As I have written earlier, I don't consider the jury system itself to be the center of the issue and I also believe that most teachers are decidedly well-intentioned. On the other hand, among the least popular statements were statements such as "*Usually I haven't had anything to complain about the evaluation*" (6%) and "*I have always been happy with the evaluation*" (9%). Considering the aforementioned nature of the question format of question 6, a relatively safe impression to be deduced from the results is that the Finnish students are the most interested in receiving a competent evaluation and that measures to improve the current model of evaluation could certainly be taken in their opinion.

As can be seen by comparing the results between the two groups, the exchange students' results for question 6 differ significantly from the Finnish students' answering. It would seem, again, that the distinctness of the exchange students' results would suggest a fundamental attitude difference towards the education. In other words, the exchange students appear remarkably more appreciative of their education. While the statement "*A competent evaluation is important for my motivation to study*" (37%) was the fourth most popular statement of the exchange students, their three most popular statements were "*My experiences on final reviews have mainly been positive*" (57%), "*I trust that my teachers*

are fair in their evaluation" (50%) and "*Usually I haven't had anything to complain about the evaluation*" (40%). Furthermore, the statement "*I don't really care about the evaluation*" was picked by 30% of the exchange students and the statement "*I have momentarily lost my motivation to study after having received my evaluation*" was picked by only 6% of the exchange students compared to the 42% of the Finnish students who picked that statement. On the other hand, 23% of the exchange students did also pick the statement "*The evaluation has discouraged me on some occasion*" and only 6% picked the statement "*I don't think that the current model of evaluation can be improved that much more*." While these results do not enable decisive conclusions to be made, they do appear to be in line with the previously presented assumption that the exchange students may experience the evaluation in the same way as the Finnish students, but that they are more appreciative of their education overall, which might make them less inclined to criticize the deficiencies of the education. Most importantly, however, the exchange students' results for question 6 are valuable in that they demonstrate how differently the questionnaire may be answered and provide another perspective to the Finnish students' results.

As a final note, I should reiterate that these results may, at best, be seen as suggestive of any broader views of these specific groups of students. In many results of the survey, the Finnish and exchange students' results were within each others' combined margins of error.

AllWell? Study Well-Being Survey

Aalto University has as of 2016 committed to a four-year strategy of improving student well-being by surveying students each year on their well-being. The first survey was conducted in 2017. (Aalto University, 2018a) The specific results of the surveys are classified and used to improve the education at the different faculties at Aalto University. Certain results are shared at presentations to students as well. I participated in a briefing for architecture students regarding the 2017 survey held by Mikko Inkinen, study psychologist and representative of the AllWell? project. The occasion included a student discussion and group works where students were asked to propose ways for improving their own well-being. I received permission to record and observe the event for potential use in my thesis. Most of the discussion revolved around student well-being and student evaluation was only briefly touched, however, so I decided to exclude an analysis of the event in my research. The briefing was prompted by the finding that roughly 25% of architecture students appear to be close to suffering a burn-out in their studies. In comparison, the average result among other university students for the same metric is 10%. The architecture students' results were also striking in that no architecture student reported that they felt energetic or capable of studying at their full capacity. (M. Inkinen, survey briefing, 1 November 2017) Other specific results were not disclosed at the event. I considered compiling a detailed summary of the architecture students' overall results after an initial meeting and discussions with Mikko Inkinen and Viivi Virtanen but decided that a referral to the existence of these results would better fit my own inquiry. Having had a look at the overall student results at my meeting with Mikko, I believe that a close analysis of the overall results may also be valuable to understanding the effects of the different models of evaluation on student well-being at different university faculties (M. Inkinen, personal communication, 17 November 2017).

Two Teacher Interviews

Each of the seven interview questions are presented below and followed by both of the teachers' responses and my own commentary. *Interviewee A* responded in writing via email while *interviewee B*'s answers are transcribed and translated from a phone interview conducted with the respondent as delineated in the chapter *Methods* (section *The Teachers' Perspective*).

Questions and Answers

1. On how many design studio courses have you participated as a tutor or teacher (estimate)?

A: "8 master level studio courses dealing with real problems in real contexts. 8 years of teaching first and second year students."

B: "I'd say that I've participated in around twelve or fourteen design studio courses."

Based on their answers, both interviewees are experienced design studio educators.

2. What kind of pedagogic training have you received?

A: "I did a half year pedagogy training abroad."

B: "Teaching in my position requires that you complete at least 25 credits of pedagogical studies. I completed these studies in Aalto University's own program. The package mainly consisted of general pedagogical studies, including observing teaching and commenting on it."

Did the pedagogical courses include any teaching related to design studio courses?

B: "We discussed planning, teaching and evaluating courses on a general level, which obviously concerns studio courses as well. In other words, the pedagogical training provided by Aalto covered all sorts of fields, including ones that aren't creative in the same way as architectural education is."

Did the courses include any teaching related to evaluation?

B: "We discussed different ways of evaluating students among colleagues on the courses. Different fields have very different ways of evaluating student performances."

Would it be correct to say that there are no guidelines for how to conduct the evaluation on design studio courses?

B: "Yes, I believe you could certainly say that. I should mention though that there are guidelines for conducting the evaluation of bachelor's and master's theses. There are subcategories for evaluating different elements of the works. They are by no means official guidelines to be used on studio courses although some of the guidelines closely relate to design studio courses."

These responses are in line with what I was told in my meeting with Kari Nuutinen, specialist in university pedagogy and representing Aalto University's School of Arts, Design and Architecture. One part of Nuutinen's work is organizing and conducting the pedagogical courses that are a part of the 25 credits course package in university pedagogy that teachers in Aalto University are expected to complete. Having educated several architecture teachers, Nuutinen also concurred with *interviewee B* that the courses deal mostly with general pedagogy and that none of the courses specifically focus on architectural education. Nuutinen did remark, however, that on one of the courses teacher students have been tasked to search for pedagogical research relating to their respective fields and write essays on these papers. In their essays, architecture teachers have commented how it has either been impossible or very hard to find pertinent or substantial research on architectural pedagogy. (K. Nuutinen, personal communication, 14 December 2017)

3. Describe, in general, what you think a good model of evaluation is like.

A: "Good evaluation leaves the student enthusiastic and in a stage of striving to learn more. Nevertheless this is often a challenge, as it is difficult to communicate negative feedback in a positive way as it is difficult to receive negative feedback in a positive way!"

B: "I believe that at the beginning of courses the tasks and topic of the course should be clearly determined. The goals of the course and the questions that it asks should also be generally discussed. Then students usually have their own answer to these questions and they end up defining and reshaping the initial scenarios in their own works. A good model of evaluation should take this into account. We usually also have these more objective or broad quality requirements for the works. A good evaluation needs to consider both of these aspects."

Interviewee A underscores here the conflictive nature of the teacher's task in providing feedback to a student. On the one hand, the teacher's desire is to positively support the student, while, on the other hand, having to provide negative feedback may seem to contradict this desire. *Interviewee B* considers the practical challenges of defining clear evaluation criteria on design studio courses. As *B* notes, it is in the students' interest that the course assignments may be problematized and reshaped by the students. This means that it may be difficult or counterproductive to precisely define the evaluation criteria at the beginning of the courses. Too strict criteria may also have the effect of restricting the students' own voices.

4. How do you conduct the evaluation of students on design studio courses led/instructed by yourself and why?

A: "I strive to conduct evaluation throughout the design process during each tutorial in a communicative manner as a discussion between me and the student. In the problem based learning courses, where the framework of the design often is very complex and relates to real issues, the evaluation is to a big degree to remind the students of different aspects, that might not have been thought through yet. When the course is more focused on only creativity and a more narrow spectrum of design, the evaluation is likewise something that I think should happen through the tutorial sessions. But there the focus can be more of leading the student closer to her/himself and to a work that is truthful and reflects the task in a clear understandable manner.

I think most learning happen when you are active yourself, this is why I think the one way evaluation is not as fruitful as an evaluation in a form of discussion, searching for an answer together. I know it is not always possible and I also know there is a long tradition of one way evaluation in our school. I have strong memories of very unpleasant situations from my own studies and I am of course trying to avoid to repeat any situation like that."

B: "First we try to establish the task goals and topic, as mentioned. After that, the students work on their assignments while receiving tutoring. Lastly, the evaluation consists of a couple different phases. First, we have an event where all of the students present their work after which each of the works is discussed. It's sort of a discussion where general topics are brought up and we go through aspects of the works that we still think are problematic or that we regard to be especially successful. The students then participate in this discussion. So our aim is that this

event is sort of a public discussion. If we have the chance we also invite outside individuals to participate in the events. They can then provide first impressions of the works, given that they are seeing the works for the first time. Their views usually differ somewhat with the views of the teachers who are familiar with the works, which is interesting since it provides the students with new angles to their works.

After the presentation event is over the three most senior teachers on the course go through the works by themselves more closely. We then discuss the works via email and consider the good and weak aspects of the works. This way we try to gain an understanding of the general quality of the works on the class and how demanding the topic and assignment seem to have been. By comparing the works we then sort of get to determine the grades. The grades then reflect how demanding the course has been and the works are ranked with respect to one another. At this point, we then try to consider the works more objectively and include technical and more detailed remarks in our assessment that may not have been brought up in the presentation event. In this email discussion, we then compile this summary of remarks that we communicate to all of the students. Many remarks are the same that have come up in the presentations, but we've noticed that these remarks may easily have been forgotten by the students so we've considered it a good thing to provide the students with a written feedback as well. It's sort of a small list of plusses and minuses."

Is the list common for all students or do you provide a separate list for each student?

B: "A separate list for each student."

Both respondents appear rather conscientious about student evaluation on design studio courses. Considering the student survey results, it would appear that the interviewees are more considerate in their evaluations than the average teacher. *Interviewee A* mentions that they have had own unpleasant experiences as a student of being passively reviewed which has prompted them to value the use of personal discussions as a tool for communicating feedback to the students. *Interviewee B* gives a description of the conventional way of evaluating students at the final review, although the interviewee's word choices and description underline that it is first and foremost a presentation event (*esittelytilaisuus*) for discussion. This primary sentiment of what the final review stands for is in line with my own notion of its central idea. In other words, the idea of the final review is more about generating educational discussions rather than evaluating students. *Interviewee B* still acknowledges that the event is a part of the process of evaluating the students and that the discussions do revolve around "*aspects of the works that we still think are problematic or that we regard to be especially successful*."

Interviewee B also provides insight into how course teachers may conduct the actual evaluation and grading of student works. It is clear based on the interviewee's descriptions that a considerable part of the evaluation criteria are determined retroactively and that the works are graded by comparing performances rather than by using predetermined parameters. This is obviously problematic from the students' point of view for various reasons that I have dealt with in previous chapters. For example, this puts emphasis on the competition between the students and the pleasing of course teachers. The interviewee did, however, underline that this is, in part, due to the fact that the topics and assignments are often broad, which allows students to determine some of the assignment specifications themselves. This makes it impractical to define very specific evaluation criteria at the beginning of the courses.

I am sure this is unavoidable to a certain degree, although my own argument is that, in general, evaluation criteria on design studio courses could still be made considerably more specific while still keeping the course topics broad.

Interviewee B also mentions that they have come to provide written feedback to students since comments at the final reviews may easily be forgotten. The practice of providing each student with a list of plusses and minuses appears to be a valuable addition to their course evaluation practices.

5. On what basis do you conduct the evaluation in this way?

A: "I don't have a better reply than through intuition and personal experience. I guess I have learned that the results are better when the students are treated as equals and also learned that I can learn as much as they learn as long as I stay open in communication. Still, in the studios we do have mid reviews and final reviews, to have deadlines and for the students to be able to follow what the other students do. But, in the problem based learning courses, that I now teach each student works with a different task and we have emphasised that they work together as a team, all contributing with their part, that they do not compete with each other. I think this kind of approach changes the ambience a lot."

B: "In part, it can't be avoided that this type of an evaluation is a part of a tradition. This habit of having student presentations and then assessing the works publicly is an academic tradition. So the way we do it has to do with that. On the other hand, pedagogically, we've considered it useful for the students to get to look at each other's works one last time when they've been finalized. And then we also try to discuss the course topics generally, so it's sort of a general summing up of the course. The written part of the evaluation is something we've considered to be a good thing since we've received feedback that students often don't remember what has been said at the presentations. The event may be quite intimidating for the students. By providing the students with some written feedback, we've addressed this issue. It's a technique that we've recently started using on some of our bachelor's level courses as well."

It appears that both of the interviewed teachers rely mostly on their own personal experience in justifying their way of evaluating students. *Interviewee A* also discloses here that they do also include final reviews as a part of their courses. However, *A* emphasizes that student competition is avoided by asking the students to work on different tasks as a team. As the interviewee notes, it is possible that this might change the ambience on the courses a lot.

Tradition is also brought up by *interviewee B* as a reason for reviewing student works at final reviews. *Interviewee A* points out that they include final reviews to have deadlines and both interviewees bring up that the practice enables students to study each other's works. The practice described by *interviewee B* of providing students with written feedback appears to have been prompted by feedback from students. Considering that *B* mentions that they have recently started using the technique on bachelor's level courses as well, it appears that this method is a relatively new addition to their course evaluation practices.

6. Does the model of evaluation that you conduct on your design studio courses fulfill the qualities of a good model of evaluation?

A: "I hope it does, but I guess you will get better feedback from our students for this question!"

B: "I do think so for the most parts. One risky thing about our way is inviting outside reviewers to the presentation or evaluation events. It sort of adds a lot to the discussion, which is a good thing in my view considering that new thoughts come up. On the other hand, it also makes the reviews more unpredictable. Individuals who see the works for the first time may misinterpret them or not understand the topic of the course and provide the students with quite damning judgments out of the blue. I still think, though, that the plusses are greater than the minuses of inviting outside jurors. After all, the course teachers may be able to direct the discussions somewhat and underline for the students which remarks they should pay attention to and which remarks may have been throwaway comments."

Both interviewees appear for the most parts satisfied with their course evaluation practices. *Interviewee B* remarks that outside reviewers who are not familiar with the student works or course topics may not always provide pedagogically sound feedback to the students. Considering that outside reviewers may accidentally criticize aspects of the student works that may have been supported by the course teachers in the tutoring, this may sometimes put the course teachers on the spot together with the students. As *interviewee A* notes, the most pertinent feedback on the student experience of the teachers' evaluation practices may be obtained from the students themselves.

7. What are the three most demanding things when evaluating student performances on design studio courses and why?

A: "The most demanding thing is to communicate the negative aspects. The most difficult task is to communicate an awkward design, that does not feel architecturally right, in an aesthetic aspect. The problem in this case is that I need to question who am I to define what is beautiful or not or I can be of this opinion, but somebody else can be of another opinion. This is more difficult when you can see that the student has worked a lot and follows the actual framework of the design. If it is a design that is clearly not responding to the framework, or if the student has been lazy, it's easier. Still I think also the aesthetic aspects are important and should be communicated in some way, even if it would be healthy if the student is able to see it as it is, only my opinion.

Another challenging thing is to keep the student enthusiastic. Often the students have too much work to do and not enough time for the studio, especially in the end when architectural studios requires a lot of input. Sometimes, if I myself am overworked and would like either Christmas holidays or summer holidays to start, it can be difficult to keep the high energy alive.

The third challenge is to grade the students. It is very difficult to make this process fair, as they all always have been putting a lot of effort on the work and as it is not always the end result that should be evaluated, but also the process."

B: "The problem with studio courses is that the topics are usually rather broad and demanding while the evaluation should still include what the general goal of the course is and consider how each student has defined the tasks for themselves. It may sometimes be difficult to be impartial in the evaluation when the students may have approached the tasks differently. This is perhaps the most difficult aspect of the evaluation.

Another difficult aspect is when there is only a short amount of time to discuss each student work in the final review. Considering that the courses last for one whole semester, you only get to touch on a few subjects in the review while lots of things are left out.

Lastly, when evaluating the works alone you often leave out aspects of the students' performances that aren't visible by just looking at the works. These are, for example, course participation and activity, group dynamics and similar things. Is it possible or not to consider these aspects as well?"

The two teachers offer varied responses as to what the three most demanding things are when evaluating student performances. Both teachers agree, however, that one key concern is considering other aspects of the students' performances on the courses than just the final works. *Interviewee A* notes that it shouldn't always be the end result that is evaluated, but also the work processes of the students. *Interviewee B* adds that the students' course participation, activity, and similar things should also be considered in the evaluation, although these are often easily bypassed.

Keeping the students enthusiastic on the courses is also mentioned as one key difficulty by *interviewee A*. *Interviewee B* underscores that fair treatment in the final reviews is particularly difficult due to the shortage of time in the reviews.

According to *interviewee A*, the most demanding thing when evaluating student performances on design studio courses is communicating aesthetic criticism. As *A* remarks, providing such criticism may be challenging considering that aesthetic aspects of the works may be matters of opinion.

Interviewee B emphasizes again that the most difficult thing about the evaluation may be being impartial in the evaluation when the students have approached a broad design task in various different ways.

5 Discussion

Summary

In the previous chapters of my work I have:

1. provided a personal account of my own thoughts and experiences of the issues with student evaluation on design studio courses
2. presented a literature review including a description of what official guidelines stipulate with regards to student evaluation and a reading of the subject discussion in the *Journal of Architectural Education* through the years
3. introduced the findings of a student survey involving 33 Finnish students and 30 exchange student at the Department of Architecture of Aalto University
4. presented two teacher interviews.

My personal account revolved around the central proposition of my thesis, which was that student evaluation on design studio courses is generally handled poorly. In my account, I presented my own arguments in support of this proposition and detailed the multifaceted nature of the issue. One of my central concerns was that the vague methods of evaluation on design studio courses enable an authoritative pedagogical model where students may be unduly influenced by their teachers, critical thinking may be muffled, and students may be hindered in their growth into architects with their own singular voices.

The idea behind deposing my own thoughts and experiences in one chapter before doing any other work on my thesis was to use my own criticism and student experience as a basis for my inquiry. My assumption was that my criticism would contrast my findings. As it turned out, this appears to have been a false assumption for the most parts.

Most of my findings, including the findings of my reading of the *Journal of Architectural Education* and the student survey results in particular, appear to support the proposition that the prevalent and traditional model of evaluating students on design studio courses in schools of architecture, is, in fact, pedagogically deficient.

As my reading of the *Journal of Architectural Education* proved, not a single article expressly supported the prevalent model of evaluating architecture students on design studio courses while several articles offered widely substantiated critiques of the model. It should be noted, however, that most of these articles neglected to discuss the grading of student performances while emphasis was put on criticizing the design jury system.

My inquiry into what official guidelines stipulate with regards to the model of evaluation on design studio courses also found no basis for the current practices.

The student survey results were also in line with my own criticism

to a surprising degree. While the group of exchange students appeared generally more appreciative of the student evaluation on design studio courses, the Finnish students provided particularly critical results. The most acute results of the survey indicated that the Finnish students were especially critical with regards to the clarity, level of specificity, and verifiability of the model of evaluation. Other metrics that registered particularly critical results from the Finnish students were those assessing the clarity of the evaluation criteria on the courses, whether or not the courses had decreased the students' energy to study, and whether or not the students had been pressured to conform to prevailing standards in the education. In choosing between 22 statements regarding the evaluation, the most popular choice of the Finnish students was the statement "*A competent evaluation is important for my motivation to study*" with 88% of the students picking that statement.

As I based my work on testing my own criticism of my experiences at Aalto University, my initial criticism was directed at the pedagogical practices upheld at Aalto University. My understanding was, however, that the practices were prevalent all around the world, which was an assumption that all of my findings also supported. All of the articles in the *Journal of Architectural Education* addressed the same pedagogical model of the design studio and the 30 exchange students surveyed who had come to Aalto from 24 different universities from around the world all reported relatively small differences in the model of evaluation in their home universities. Indeed, the issues with the evaluation of student performances on architectural design studio courses appear to be systemic in architecture schools around the world.

Problematization of the Results

While the results of my inquiry would point towards the conclusion that the prevalent pedagogical model of evaluating architecture students on design studio courses is deficient, certain reservations make it difficult to make definitive judgments on the matter.

Firstly, the student survey that I conducted was small-scale and its results can hardly be generalized outside Aalto University even if the model of evaluating students in other universities is identical. Cultural differences and other background differences of the students may affect the results notably. The differences in the results of the two groups that I surveyed (Finnish and exchange students) provide an indication of this. The Finnish students' results within Aalto University also include a high margin of error of approximately 16,36%.

The fact that most of the articles in my reading of the *Journal of Architectural Education* were critical with regards to the pedagogical practices of the prevalent design studio model can also partly be seen as a result of the nature of academic journals that seek to develop fields. Assuming that some practice within a field is well established, it is in the nature of academic publications to primarily highlight issues that have been revealed in the practice rather than promote the status quo. I do not mean to imply by this that the findings of the critical articles in the journal would be invalid, but only state that academic articles supporting the status quo of any established practice may, potentially, be underrepresented in journals. These reservations may be especially valid if the discussion of a topic in a journal has been scarce. A smaller discussion may more easily be one-sided.

There also remains a slight possibility to make false broad assumptions of general attitudes even based on seemingly unquestionable research data. Certain issues and criticisms may be fashionable when they

are discussed in a community or framed in questionnaires. Many topics relating to education are also strongly affected by politics; there is an opposition to most types of ideologies. In the end, the thing that speaks the most for the support of the traditional design studio model is the fact that the model remains in use in universities throughout the world. True attitudes are measured only when the time for change is concretely at hand.

The teachers' interviews also highlighted the difficulty of being impartial in the evaluation when the course topics are broad and the students may reframe their tasks altogether differently. Defining specific evaluation criteria at the beginning of such courses may even be counterproductive for the students. Without clear evaluation criteria, it may be difficult to provide substantiated evaluations to the students.

Reasons for No Progress

Considering the overall results of my own work as well as the notably one-sided criticisms of the model of evaluation in the *Journal of Architectural Education*, it is remarkable that the pedagogical practices of the design studio appear to have stayed more or less the same for decades.

One reason for this may be that the education has been dealing with other, more pressing related issues, leaving developments in more subtle questions wanting. I am here referring to gender and racial bias concerns within the education that, based on my reading of the JAE, appear to have been prioritized issues still not very long ago (maybe even still today). Several of the key articles that I picked out for my reading are, in fact, articles that focus on gender and racial bias issues in the pedagogical practices of the design studio. In their 1993 article, Sherry Ahrentzen and Kathryn Anthony posed the question of whether it would be possible to imagine a scenario where most students and

faculty at an architecture school were women. Less than twenty years after that, imagining such a scenario is not required. When I started my studies, most of the students in our class were female and throughout my studies, most of my teachers have, in fact, been women. At least from the perspective of having studied at Aalto University, diversity issues do not appear as acute as they have before. Of course, the fact that the representation of gender might have evened out in architecture schools does not exclude the possibility of continued gender biases. I am sure there is still work to be done in these regards despite the progress.

As some writers in my reading of the JAE also pointed out, architectural educators are almost exclusively architects themselves with little or no pedagogical training and architecture schools may fear deviating from traditional teaching methods as this may risk them losing prestige (see section *Resistance to Change*). Considering this cyclical tradition of employing former students as teachers and that any lasting changes would need to be managed on an institutional level, it may not be so surprising that even widely criticized traditions in the education would hold tight.

In my experience, another major reason for a certain reluctance in teachers as well as in students to not consider the evaluation of student performances too seriously is that it is easy to make the argument that the evaluations are not the actual *point* of being educated as an architect. This is an argument that I have made to myself on likely every creative course that I have participated in as a student. While I have on most occasions been critical of the lack of proper evaluation criteria and frustrated by the course evaluation practices, I have always told myself that my concerns aren't very relevant because receiving a proper evaluation for my work isn't the *point* of what I am doing. I keep telling myself that the point of my education is the work itself and the studio

experience as a whole. The grades may be viewed as merely subjective impressions and thus as only one small part of what the education has to offer. However, while these thoughts may be noble and true on a theoretical level, they do not reflect the significance of the evaluation on a practical level. As my own writing and findings have demonstrated, the evaluation of student performances carries a lot of weight with the students' motivation to study. This ambivalent attitude towards being evaluated is perhaps a necessary trait of an artist; in order to find the strength to believe in one's own artistry after having been judged, one needs to belittle that judgment in advance. Secretly, the artist dreads being evaluated and revealing that someone else's opinion has power over them.

Recommendations

Suggestions in the JAE

Insightful recommendations and ideas for developing the way students are evaluated and taught on design studio courses appeared in several forms in the articles. Some writers bulleted lists of concrete ideas while others presented basic fundamentals for sound teaching practices.

Goals of the Education

In one of the first articles in the JAE to discuss the goals of the education of architects, Ralph Rapson outlines:

"We need to turn out architects who can say "no," who will not compromise on vital issues. Direction in teaching does not mean any narrow, dogmatic approach... Fundamentally, education is concerned with the individual – it must develop the man's initiative and intellectual powers." (Rapson, 1959, 22)

Leif Braaten provides some more detailed descriptions of necessary conditions for creativity along these same lines. His writing, adapted from a general theory of some necessary conditions for creativity and heavily influenced by the writings of renowned psychologist Carl Rogers, remains, in my view, perhaps the most compelling account of what the education of architects should look like that I came across in my reading. The first condition asks that the teacher acknowledges that "*man inherently has a* tendency to actualize himself." In practice, the teacher's primary function is to incite learning in the students, not really teach them anything. This does not imply that the teacher's role is meaningless. Rather, this turns around the notion of the students being empty vessels that knowledge is poured into. The second condition asks that the teacher sets up "*an atmosphere of* psychological safety" in relation to the students. What this means is that the teacher must convey that the individual student is both appreciated and accepted as a unique person so that a mutual trust is built. Braaten emphasizes:

"The teacher must be especially sensitive to the student's positive rebellion which is such an essential ingredient in the potential artist. As far as humanly possible external evaluation should be minimized." (Braaten, 1964, 8)

Reactions to students' works may be shared, but only by carefully avoiding the implication that the student is wrong and the teacher is

right. The third condition asks that the teacher "*encourages* psychological freedom." This signifies that the teacher should encourage the students to play around with new ideas, take risks and explore their own sensibilities. While appealing to the student's uniqueness the teacher should also make all of the resources that the school and the teacher have to offer available to the student. Lastly, Braaten recognizes that these conditions do not exclude that the students need to approach their freedom with certain responsibilities. Construction, materials, assignment restraints, ethics, the students' own abilities etc. are all limits that the students' need to learn to recognize and address. (Braaten, 1964, 8-9)

The Critic's Role and Biases

Wayne Attoe provides some insightful remarks on criticism in the education that still support Braaten's conditions for creativity. Firstly, Attoe recognizes that the critic's position is affected by both the critic's inherent biases and their view of their role. In order for the criticism to help rather than intimidate, the critic's biases and self-image should be made clear. Biases may include favoring experimentation versus conservative approaches or wood architecture versus concrete architecture. The critic's view of his role may involve the critic seeing himself, among other roles, as "*a missionary, a purveyor of good taste or a steward of the environment*." In communicating their criticism successfully, the critic should disclose their biases and view of their role, which then eliminates the implication that the student is wrong and the critic right. Attoe summarizes:

"In sum, criticism is first and foremost about the critic, not about the object criticized... Once the bias in a critic's assessment

or position is recognized, those who are the objects of criticism are freed of the burden of Final Judgment and can drop defenses to learn from the frank encounter with someone whose life has been touched." (Attoe, 1976, 20)

Renaming Practices

Attoe also suggests using another term instead of the word criticism when referring to the reviewal of architectural works. Instead of the word "criticism," which usually has a negative ring to it, Attoe suggests using the words "purposeful response" which would portray the reviewer as more of a co-worker. (Attoe, 1976, 21) Personally, I am slightly skeptical of the benefits of renaming concepts since words ultimately get their meaning from what they represent. Any new naming conventions would likely sooner or later earn the same negative ring to them if the thing they represent isn't altered radically at the same time. Then again, if some negative concept is successfully radically altered so that it is perceived positively it does not necessarily have to be renamed anymore.

Redistributing the Teacher's Power

Thomas Dutton, an architectural educator himself, suggests a different pedagogic approach in the design studio which he calls "transformative pedagogy." His model involves redistributing the power normally held by the teacher with all of the students. Firstly, students have a say in all areas of studio life. Most importantly, as Dutton notes, the final grades of the students are an "*equal combination of self-evaluation, peer evaluation, and my* [the teacher's] *evaluation*." Secondly, the focus is shifted from the teacher by asking that the students work in groups. Here, much of the teacher's effort is in trying to keep the dialogue within the group so that the teacher's comments are ultimately seen as simply "*one of many biased observations*" that should be considered as critically as anyone else's comments. Thirdly, the power differential between students is balanced by requiring that "*in all decision-making matters there must be a consensus within the group*." According to Dutton, all of the students then have the power of being of effect, while, at the same time, they also "*come to realize their responsibility to the overall project*." Fourthly, the pedagogy "*facilitates the investigation of that which students deem important*." In other words, the course content is determined from the start based on the values and positions of the students. Lastly, Dutton recognizes that the model may provoke varied reactions in the students, but maintains that, in practice, his non-authoritarian model has been "*indispensable for the nurturing of dialog and critical thinking*." (Dutton, 1987, 19-20) Although I tend to agree with the points Dutton makes, I do believe that most students, including myself, would still appreciate the chance to participate in studio courses where the work is done individually as well. I have, in fact, participated in several courses where the work was done in groups or pairs. While these experiences have generally been positive and perhaps slightly more "democratic" with regards to teacher interference I have personally valued my individual courses just as much, if not more. In the end, group working requires making compromises, which might only be another way of restricting a student who would like to explore their own sensibilities freely. Although designing a curriculum is not the focus of this thesis, I believe students should gain experience in both individual and group working. Of course, Dutton's suggestions may be applied selectively to different course types as well.

Self-Evaluation

Self-evaluation by students was suggested also by a few other writers (Ledewitz, 1985, 6; Webster, 2007, 26). According to Ledewitz, developing self-criticism skills is necessary for the development of one's design skills. As Schön exemplified in his writing, the process of designing is a cycle of testing and evaluating different design solutions, which requires the ability to critically assess one's own work continually. (Ledewitz, 1985, 6) Personally, I wouldn't mind evaluating myself as a student as well, in addition to receiving a teacher's evaluation. I do, however, think that a students' self-evaluation may, at best, function as an addition to an evaluation provided by the teacher. After all, my personal experience is that students are the most interested in receiving feedback from someone else than themselves. In other words, I do not think it is a solution to the dilemma of evaluating students in itself, but rather an added extra dimension in the evaluation.

Evaluating Sub-Competencies

Adapting loosely from some of Donald Schön's writing on "design sub-competencies" Ledewitz also outlines a set of criteria that could be used when evaluating students.

Ledewitz outlines abilities that students should display:

"1. To demonstrate an appreciation for the givens of site and program, and their implications for design.
2. To articulate their design intentions.
3. To construct a conceptual framework for design within which to evaluate different design decisions.
4. To make appropriate use of precedents; to demonstrate an understanding of the relevance of particular solution-types to the problem.
5. To apply to design the consideration of a rich variety of design factors, such as climate, lifestyles, context relationships, materials, etc.; to recognize an appropriate set of factors for a given problem; and to be aware of priorities among those factors.
6. To make choices among alternatives with an appreciation for their consequences.
7. To detect and follow through the implications of earlier moves.
8. To recognize the connections among the implications of design moves in terms of various different design factors.
9. To evaluate the consequences of design moves: to relate design decisions to design intentions.
10. To work out coherent patterns of design decisions, consequences, implications, and evaluations." (Ledewitz, 1985, 7)

Ledewitz recognizes that these competencies are mostly process-oriented and that they should not be the only basis for the evaluation of the students' performances. Charles Burnette also suggests a similar set of "*abilities required in architectural problem-solving*" to be used as a basis for grading students:

"1. Problem Recognition and Initiative
2. Gathering and Using Information
3. Organization and Synthesis
4. Presentation and Communication
5. Production and Implementation
6. Management and Utilization
7. Analysis and Evaluation" (Burnette, 1974, 19)

I support dividing the evaluation of students into sub-competencies, which may help students better recognize their weaknesses, and I find that several of these sub-competencies may be effective in the evaluation of students' works. However, the criteria should be kept concise and easily understandable so that the teachers, as well as the students, may grasp their meaning and learn to recognize the distinctions between the sub-competencies.

Enhancing the Design Jury System

Kathryn Anthony also provides a list of ten recommendations that are primarily thought of as means of enhancing the design jury system instead of terminating it (I have reworded the list to make it shorter):

1. Establish clear evaluation criteria with the students at the beginning of a project.
2. Consider conducting a review session a week or two prior to the conclusion of the project so that students may "*incorporate some of the revisions suggested by the faculty into their final designs*."
3. Provide training in presentation techniques and skills. Possibly videotape students so that they may study their own presentations.
4. Consider only including presentations in the final review and no judgment of the projects in public. Only use private methods of providing criticism (strictly in writing).
5. Ensure that all jurors are well informed of the design programs before the final review.
6. Require students to submit their works at least 24 hours before their presentations. This will allow them to rest before the review.
7. Insist that students are given written criticism.
8. Encourage communication of "*more specific, constructive and impersonal criticism*" by the jurors.
9. Instead of reviewing each student individually, review the whole class at once in an open exhibition commenting on general trends and themes. Specific comments may be brought up, but students names should not be mentioned.
10. Finally, teachers can experiment with different ways of judging the students and ask the students themselves what they prefer. (Anthony, 1987, 10-11)

While I think that most of Anthony's recommendations are sound, I find the points 2. and 9. slightly problematic. Firstly, an additional review session before a potential final review, as suggested in the second point, would likely only stress the students even more. A review session designed to provide students with comments so that they may "*incorporate some of the revisions suggested by the faculty into their final designs*" would likely also be felt as a vehicle for the teachers to issue pressurized demands for changes that the students may not agree with. In my experience, students are already provided with sufficient comments in tutoring sessions so that an advance review session is unnecessary. Students are usually also scrambling with their workloads one or two weeks prior to the final reviews and a lot of the works are still very much works in progress at that point. Secondly, while the idea of reviewing the student works all at once in point 9. is not necessarily a bad recommendation in itself, I believe it may not be as satisfactory an experience for the students as reviewing the works individually is. It is likely that when reviewing the works in a mass, some students' works may get even more unfairly sidelined than when having each of the works reviewed separately. Eventually, this may be a frustrating experience for the students. After all, each student seeks recognition for their hard work.

According to C. Greig Crysler, the Architecture Review Commit-

tee report that I referenced earlier also recommended that "*evaluations be based on written criteria laid out in advance to eliminate ambiguity and misunderstanding and that students receive a twice-yearly audit of their progress*" (Crysler, 1995, 209). As with Anthony's recommendations for clear criteria, I concur that this forms the basis for a successful student evaluation. Progress audits may also be a good idea, although they would require rather developed evaluation procedures to be used on each of the studio courses in order for the teacher who is tracking a student's progress to be able to meaningfully determine the actual progress of the student.

Replacing the Design Jury System

Helena Webster and Kathryn Anthony both also provide suggestions for replacing the design jury system with completely other ways of reviewing students' works. In the conclusions of her article, Webster ponders:

> "The design jury appears to be architectural education's sacred cow. So what is to be done? If, as the research suggests, the sacred cow is terminally sick then perhaps there is an opportunity to re-ritualize and reinvigorate architectural education rather than prescribe medication, as others have suggested." (Webster, 2007, 26)

Both Webster and Anthony present the idea of organizing exhibitions that celebrate the end of the courses. Anthony adds that each work could be accompanied by an open folder for comments by all participants of the exhibitions. Alternatively, reviews could be held in small groups including peer-reviewing of works. (Anthony, 2002, 262; Webster, 2007, 26) Webster further suggests organizing "*special tutorial days*" where different experts are invited to comment on student works individually or in small groups (Webster, 2007, 26). Anthony also suggests private videotaped reviews with students or compiling the course works into brochures or portfolios that can be passed around and reviewed privately by the course participants. In Anthony's words, common themes for the alternatives she presents would be "*increased student participation, a focus on the design process as well as the design product, clarifying criteria and demystifying design, a higher level of learning, less tension and no public humiliation, a more efficient use of review time, and a variety of physical environments and presentation media*." (Anthony, 2002, 262)

Personal Suggestion

In 2014, while still working on my bachelor's studies, I wrote a feedback letter regarding the evaluation conducted on a design course, identical in structure and value in credits as the design studio courses in the master's degree. I enjoyed the course in every way, although I thought the evaluation had been handled poorly. Along with my feedback letter, I provided a draft for a proposal of an evaluation form that could be used on similar courses to evaluate students. I shared my feedback and proposal via an email list with all of the teachers and faculty members of the school as well as all of the students and received some appreciative comments on the proposal by both groups. Unfortunately, although some courses might have consequently adopted the practice of providing the students with a couple of extra explanatory supplementary grades, my proposal seemed to advance no significant improvement of the model of evaluation. Of course, as mentioned before, old traditions hold tight and I believe the problem is rather systemic than such that any single teacher could change by themselves. I would also be naive to expect any significant change to happen by simply providing my view on a matter. In large parts, however, I still believe in the argumentation and proposal that I presented then, and this thesis has in part been inspired by taking those thoughts further and contextualizing them in a more thorough thesis.

On the next two spreads, I have provided a draft of the evaluation form I submitted as a part of my feedback and proposal. The form is based on the one I presented in 2014, although I have made some changes to it. I will discuss my proposal and the functionalities of the form in closer detail in the following pages.

Plans: 3

Difficulty: +0,5

Furniture line weight wrong -0,5

Free form. Four floors.

3,5

Flr. 2 Exit route from hall too narrow. -0,5

Flr. 3 Disruptive asymmetry in wall placement. -1

Flr.

Flr.

Layout: 3

Difficulty: +0,25

Lacks atmosphere. -1

Large work, many images.

3+

Sheet 1 Layout disorderly. -0,5

Sheet 4 Images incompatible. -0,5

Sheet

Sheet

Elevations: 4

Difficulty: –

No scale people. -0,25

4

El. south Formalistic window placement. -0,75

El.

El.

El.

Workload: 100% + very difficult building

5

Work process: Consistent and determined

Beginning of work started slowly due to structural research.

5-

Attendance: 90%

4+

Final grade: 4

Goals of an Impartial Evaluation

I should start by acknowledging and reminding any reader that one of the central goals of evaluating students in a university is impartiality and fairness. In other words, students should not be discriminated in, preferably, any manner. This notion distinguishes the evaluation jury on design studio courses from evaluation juries on, say, architecture competitions. Unless the task specifications have explicitly limited the students' possibilities for architectural expression, the evaluation jury on the course should do its best to try to appreciate all the possible artistic inclinations of the students. Works cannot simply be dismissed by the jury because they are not liked, as might be the case in an architecture competition. Instead, each work should be given the same treatment with regards to the way they are dissected. Although some work may seem ugly on the outside, it might have an equally functional plan as some work that seems pretty on the outside. Both works should then receive equal appreciation for their plans. Perhaps a poor layout might be the only thing that distinguishes one work from a top work of the class. That work should then be equally appreciated as that top work of the class, apart from being partially criticized for the poorer layout. The same goes for smaller and larger details in the works. A final coursework on a design studio course can in a sense be compared to the answers a maths student provides in a final exam. There may be 20 different complex tasks in the exam and each of them is evaluated separately. If the maths student blunders completely on one of the tasks, it does not affect the evaluation of the rest of the tasks. Similarly, if some part of an architecture student's work seems like an unacceptable mistake, the rest of the qualities of the work should still be given equal consideration and appreciation as any other work on the course would get. It may seem like I am stating something obvious, but given that project works

on design studio courses are often expansive and the evaluation is conducted as it is, it is, in my view, very common for students' works to be evaluated based on broad impressions. Often some nitpicky element of a work catches the eye of the evaluation juries at the final reviews and the whole discussion of that work gets tainted. Although the final evaluation of the works is usually conducted behind closed doors, I am sure it is not uncommon that different biases or sensitivities of the jury members also skew the final evaluation disproportionally.

On top of this, in universities, students' works shouldn't really be competing with each other as they would be in architecture competitions. Each work is primarily its own unity and each student an independent entity without necessarily needing to have anything in common with any other student with regards to artistic sensibilities. Students shouldn't have to feel the need of having to conform with qualities which make other students succeed. Instead, the evaluation criteria on the courses should be such that they would allow each student to follow through with their own vision and still have their work dissected with equal consideration as everyone else's works. The evaluation should encourage the students to cultivate their own sensibilities and grow into architects with their own distinct voices.

An Evaluation Form

Considering then the complexity and extensiveness of architectural projects on design studio courses, the only way for me to even begin contemplating how to fairly assess one is approaching it systematically in writing. Furthermore, this would be the only way for me to adequately reflect my thought process in dissecting the work thoroughly to someone else. My proposal is using an evaluation form similar to the one I have presented.

I will next list different functionalities of the form. Firstly, I believe it would be important that each of the courses in a school using an evaluation form would use one that is identical or similar in its layout. This, I believe, would not only make it easier for the students as well as the teachers to relate to and apprehend, but also make it easier to develop from course to course. Furthermore, the evaluation data acquired by filling in similar forms could be more easily used to develop a framework for devising evaluation criteria on future courses. The goal of the evaluation form would be to evaluate each work thoroughly enough so that anyone who hasn't seen the work would be able to understand its quality and weaknesses according to the evaluator.

In order to guarantee a thorough evaluation, it would be logical to evaluate each of the required images, models and sections separately as well as the different aspects of the work as a whole. Given that each of the images depicts certain qualities of the project, it would also be logical to evaluate those qualities in the context of those images. Sections and different aspects of the work as a whole could be, for example, the layout of each final project sheet, the completeness of the work as a whole or the overall architectural design. By dissecting the evaluation of each of the works similarly, students would not only be likely to receive fairer and more impartial evaluations, but they would also be provided with more specific personal feedback and knowledge of how to more effectively better themselves. This way students would more easily be able to manage their own development from course to course and the education would be more efficient.

In addition to simply using numbers to evaluate different parts of the works, small text fields could be provided alongside each of the sections with which the given numbers could be elaborated on. Different multipliers or extra points could also be used to be applied to aspects of the works that may be deemed extra challenging or ambitious. For instance, students who like to take risks that turn out to be mistakes may be compensated and might still receive appreciative grades for their efforts.

Apart from only evaluating the final work itself, it would also be important to take into account the students' individual workloads, their work processes and their attendance and participation on the course. These aspects of the students' performances could be similarly graded as the rest of the sections of the evaluation form. Their weights on the final grade could also be easily determined in the evaluation criteria provided at the beginning of the course, given that they would be aspects of all of the students' performances regardless of the artistic inputs in the students' final works.

The Magic Line

The final challenge in the evaluation would be to eventually determine the final grade. However, by this point, it would be significantly easier to justify the grade having dissected the work properly. This would essentially also make it easier for the evaluator to, at the least, try to be as objective as possible when determining the final grade.

Given the enigmatic and unpredictable nature of art and architecture and, consequently, many studio courses, I would also introduce a certain basic concept to the determining of the final grade, which I will refer to here as *the magic line*. The first rule of the magic line would be that the final grade should, at the least, not be lower than what the sum of all the categories of the evaluation form would indicate. The second rule would be that the final grade can always be higher than what the evaluation form would indicate. In practice, this concept would allow the teachers to provide students with specific evaluation criteria at the beginning of the courses while still maintaining the freedom of devel-

oping works with the students that might not fit inside these criteria. For example, some student might find the evaluation criteria too restrictive and simply not fulfill them in their work. While that student might consequently receive a straight line of number ones in the evaluation form the teacher may still reward the student with the grade 5 if the student has developed an unpredictable, but extraordinary piece of work. Similarly, in a less dramatic scenario, the teacher might realize that their evaluation criteria have been unrealistic as a whole, but still provide students with more appreciative grades than strict adherence to the evaluation criteria would indicate. This would, on the one hand, provide a structure and foundation for the evaluation to always lean back on while, on the other hand, leave open the possibility for the teacher to direct students in other directions.

Time Spent on Filling the Form

I believe some people's reaction to this proposal might be that it would require too much time for the teachers to evaluate the student works in a similar manner. In my view, this argument is refutable if it were accepted that the teachers produced written notes on mainly the flaws they see in the works. Although this might sound harsh I don't think it should be regarded in this way. After all, if a math teacher evaluates an exam, they only correct the faults they find. Similarly, the categorically provided numbers themselves in the form would sufficiently indicate whether the work has been liked or not. If some part of the work is given a 5 it should not be difficult for the student to recognize where the grade came from. The grade 5 itself exclaims that the student has got it. In other words, not much is lost in a pedagogical sense by restricting the written feedback in this way, in my view. Obviously, expressing due appreciation for students' works is an important part of the work

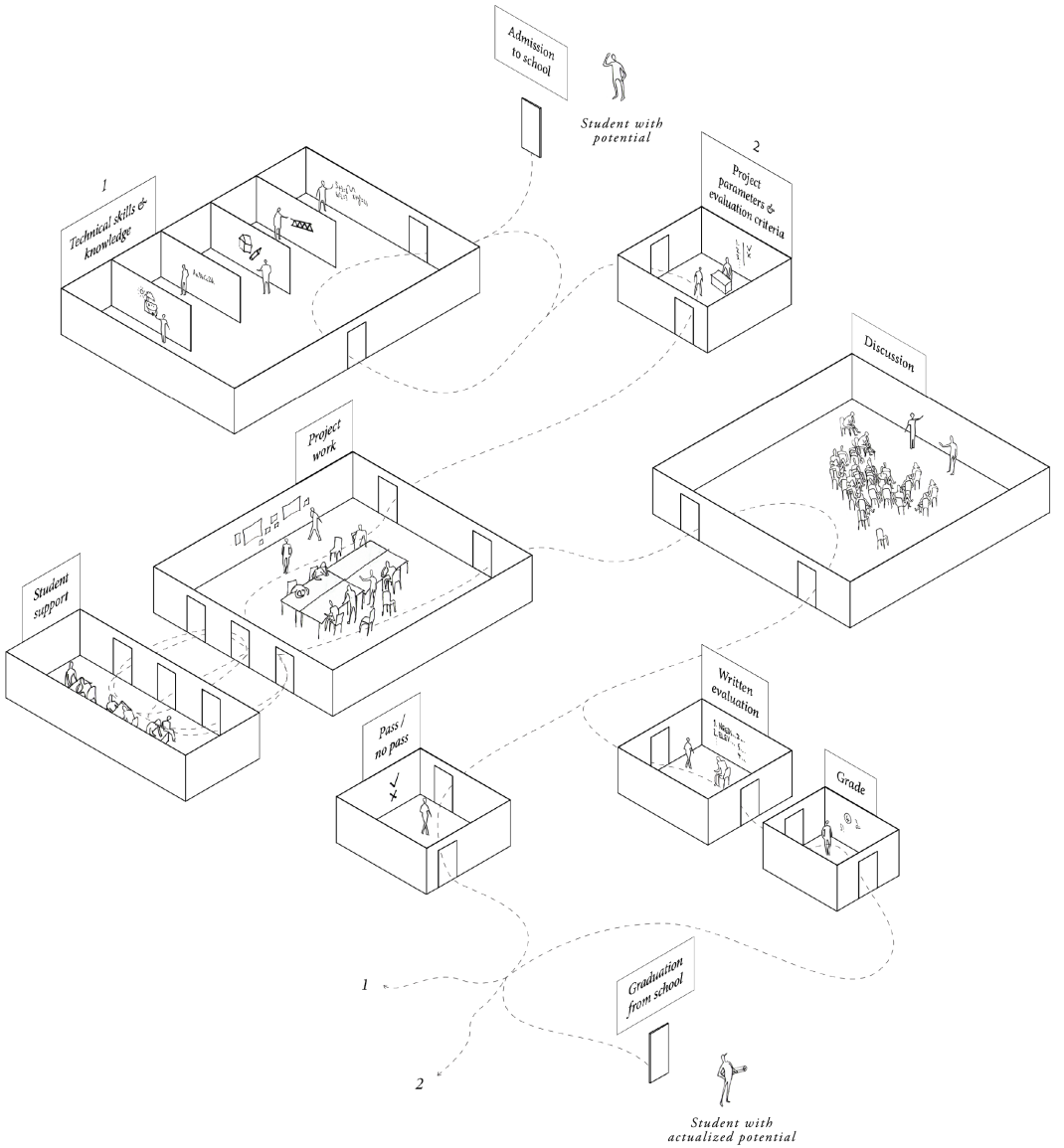
of a teacher and there is nothing preventing a teacher from providing appreciative feedback to the students in writing as well. However, this type of feedback would perhaps better fit as a part of the oral final review, for example. All I am saying, as a student myself, is that students don't need to be indulged with written praises beyond the appreciative grade they receive as much as they are interested in being provided with constructive criticism. Correspondingly, if a teacher dislikes a piece of work in some way or the other, the reasons for this should always be written down, in my view. There should always be a reason for why a teacher gives a lower grade, which is why a lower grade should always be motivated with an exact specification of what aspect in the work brought the grade down. Approaching the evaluation in this way, I am sure that filling in the evaluation form for each student wouldn't take significantly longer than it would take by conducting the evaluation without the form.

Free Reins to Creativity!

It is beyond any single teacher's influence to produce significant and lasting changes with regards to the evaluation on design studio courses more broadly. It should be the responsibility of a higher branch of the university as an institution to see to it that proper guidelines for the evaluation of students on design studio courses are provided and that they are followed through with. Hypothetically speaking, if a similar model of evaluating students as to the one I have proposed was enforced, it could have widespread effects on the field of architecture. By storing each student work anonymously along with the respective evaluations of their work, an increasingly growing database of potential research material could be built up. Course evaluation criteria could be easily based by leaning onto the framework of previous evaluations.

Students would have precedents to refer to in their defense in problem situations. Creativity would be given free reins. Teachers and schools would be able to more efficiently plan their curriculums and understand better the weaknesses of students and different classes. Essentially, the education would become more efficient in educating students and developing itself. This would be reflected in the whole field of architecture as more proficient architects would graduate from universities.

Opposite page: Model of teaching architecture in universities. The education consists of a cycle of 1. technical or knowledge-based courses such as learning computer programs or history of architecture and 2. project courses such as design studio courses. If a final grade is given, a written evaluation needs to be provided.



Process Reflection

The making of this thesis has been a lengthy process that has not only been limited to the time that I have spent working on it; I have been thinking about these themes since the beginning of my studies. It is strangely invigorating to be closing a chapter on a train of thought that has accompanied me for so long.

Although I commenced my work in the belief that I had figured out most of what I wanted to tackle in my thesis, I was struck early on by the complexity of my topic. The delicacy of my criticism also required special consideration while I was determined not to hold back on sharing any of my criticisms or experiences.

Considering my thesis structure – that I began my work by deposing my own thoughts and experiences after which I sought to assess the

validity of my own thinking – my work was also a journey of self-discovery. My initial assumption and rather clear feeling as a student had been that I represented a minority as a critic of the model of evaluation on design studio courses. After my inquiry has mostly reversed my perspective on the matter, it is hard to recall how different my state of mind was when I began my work. I believe it is a further example of the silenced complexity of my topic that I may have gone through most of my studies feeling that I had a special problem with the practices of the design studio when, in fact, it appears that many of my fellow students and other students around the world share my issues. Understanding this is a testament to how we are all similar inside and how an authoritative culture may muffle criticism despite everyone's good intentions.

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Attachments

Survey about design studio course evaluation

Select your response option or answer in your own words in the response area. The clarifications for the questions can be found on page 3.

All of the questions concern design studio courses. Design studio courses are usually worth ten credits or more and involve any kind of creative design input related to architectural design.

1. Background information

Gender: man / woman / other / N/A

Age: ..... / N/A Years studied: .....

Home university: .....

Bachelor's degree completed: yes / no

How many master's level studio courses have you completed? .....

How many of these courses have had a design focus? .....

2. Estimate how often the following methods of evaluation have been used on the courses in general

	Never				On half of the courses						Always	Don't know
Final review	0	1	2	3	4	5	6	7	8	9	10	-
Final grade	0	1	2	3	4	5	6	7	8	9	10	-
3-5 supplementary grades	0	1	2	3	4	5	6	7	8	9	10	-
3-5 suppl. grades and / or a short written evaluation	0	1	2	3	4	5	6	7	8	9	10	-
Over 5 suppl. grades and / or a detailed written evaluation	0	1	2	3	4	5	6	7	8	9	10	-

How have the methods in Aalto differed from the ones in your home university? .....

3. Please rate your overall satisfaction with the following qualities of the course evaluation practices

	Very dissatisfied										Very satisfied	Don't know
Clarity of the evaluation	0	1	2	3	4	5	6	7	8	9	10	-
Fairness	0	1	2	3	4	5	6	7	8	9	10	-
Level of specificity	0	1	2	3	4	5	6	7	8	9	10	-
Impartiality	0	1	2	3	4	5	6	7	8	9	10	-
Transparency	0	1	2	3	4	5	6	7	8	9	10	-
Consistency	0	1	2	3	4	5	6	7	8	9	10	-
Verifiability	0	1	2	3	4	5	6	7	8	9	10	-
Constructiveness	0	1	2	3	4	5	6	7	8	9	10	-
Reliability	0	1	2	3	4	5	6	7	8	9	10	-
The evaluation as a whole	0	1	2	3	4	5	6	7	8	9	10	-

4. To what extent do you agree with the following statements

	Completely disagree										Completely agree	Don't know
My grades have been fair	0	1	2	3	4	5	6	7	8	9	10	-
I can predict my grade beforehand	0	1	2	3	4	5	6	7	8	9	10	-
The evaluation criteria on the courses are clear	0	1	2	3	4	5	6	7	8	9	10	-
I know what is required for a good grade	0	1	2	3	4	5	6	7	8	9	10	-

5. Assess the evaluation or the courses in general on the following scale between the opposite statements

												Don't know
The evaluation has discouraged me	0	1	2	3	4	5	6	7	8	9	10	The evaluation has motivated me	-
The evaluation has confused me	0	1	2	3	4	5	6	7	8	9	10	The evaluation has clarified things for me	-
The courses have taken my energy to study	0	1	2	3	4	5	6	7	8	9	10	The courses have not decreased my energy to study	-
I have been pressured to conform to a prevailing standard	0	1	2	3	4	5	6	7	8	9	10	I have been supported in developing my own designer identity	-

6. Which of the following statements best describe your experiences on the courses? You can select as many options as you consider correct.

- ○ The evaluation criteria are almost never told beforehand on courses
- ○ A competent evaluation is important for my motivation to study
- ○ Usually I haven't had anything to complain about the evaluation
- ○ The evaluation stresses me because you never know what you'll get
- ○ I trust that my teachers are fair in their evaluation
- ○ I have momentarily lost my motivation to study after having received my evaluation
- ○ I don't think that the current model of evaluation can be improved that much more
- ○ I have always been happy with the evaluation
- ○ The evaluation has discouraged me on some occasion
- ○ I have cried because of the evaluation on some occasion
- ○ I don't really care about the evaluation
- ○ The final reviews make me nervous
- ○ A bad grade has continued bothering me afterwards
- ○ I have asked for an inspection of my grade afterwards
- ○ My grade has been raised after I asked for an inspection
- ○ The evaluation criteria on the courses are mainly vague
- ○ My experiences on final reviews have mainly been positive
- ○ I have received a clearly better grade than I expected on some course
- ○ I have been evaluated remarkably unfairly on some occasion
- ○ I have often felt a bit lost after the final reviews
- ○ I can usually estimate the workload on the courses well
- ○ I often feel anxious about receiving the final grade

Survey about design studio course evaluation – clarifications for the questions

Item 1: Background information

The survey is anonymous. Background information is asked for statistical analysis.

Item 2: Clarifications on the methods of evaluation

Final review: Students present their work to the whole class and the evaluation jury at the end of the course. The jury then evaluates the work orally.
Final grade: Students receive one final grade for the course on a scale from 1 to 5.
3-5 supplementary grades: In addition to the final grade, students receive 3-5 supplementary grades that evaluate different aspects of the work and substantiate the final grade.
3-5 suppl. grades and / or a short written evaluation: In addition to the supplementary grades, the evaluation is substantiated in writing with a couple of short sentences per grade. Alternatively the whole work is evaluated with a couple of sentences in writing without supplementary grades.
Over 5 suppl. grades and / or a detailed written evaluation: Supplementary grades are provided for many different aspects of the work. The evaluation is also substantiated with short sentences per supplementary grade. Alternatively, the whole work is evaluated in detail in writing without any supplementary grades.

Item 3: Clarifications on the qualities of the evaluation

Clarity of the evaluation "Has the evaluation been clear in your view?"
Fairness "Has the evaluation been fair in your view?"
Level of specificity "Have you been happy with how specific the evaluation has been?"
Impartiality "Has the evaluation treated different students in an unbiased manner?"
Transparency "Has the application of the evaluation criteria been clear?"
Consistency "Has the evaluation been consistent when comparing the evaluation of different projects?"
Verifiability "Has it been possible to reliably check the application of the evaluation criteria?"
Constructiveness "Have you found the evaluation beneficial or useful?"
Reliability "Have you been able to trust that you will receive a proper evaluation?"
The evaluation as a whole "Have you been happy with the evaluation in general?"

Item 4: Clarifications on the statements

My grades have been fair: You have received reasonable grades on every course in your view.
I can predict my grade beforehand: You can estimate what grade you will receive beforehand.
The evaluation criteria on the courses are clear: You know exactly the criteria on which the evaluation of your work will be based on.
You know what is required for a good grade: You know at which point your work is so good that you will certainly receive a grade that satisfies you.

Item 5: Clarifications on the opposite statements

The evaluation has discouraged me/ The evaluation has motivated me: How has the evaluation affected you in this regard?
The evaluation has confused me/ The evaluation has clarified things for me: Has the evaluation been confusing or clarifying?
The courses have taken my energy to study/ The courses have not decreased me energy to study: What sort of an effect have the courses had on your energy to study?
I have been pressured to conform to a prevailing standard/ I have been supported in developing my own designer identity: How has the teaching and tutoring felt in this regard?

Item 6: Selecting the statements

Sign each of the statements that apply in your view with a checkmark. You can also select two statements that are each other's opposites, if they both apply in your view.

Please feel free to provide any feedback or comment the survey. Thank you for your time (you may continue on the flip side of the paper)

Kysely arkkitehtisuunnittelun studiokurssien arvostelusta

Rastittakaa oikea vaihtoehto, tai kirjoittakaa vastauksenne sille varattuun tilaan. Sivulta 3 löytyy selvennyksiä kysymyksiin.

Kysely koskettaa kaikkia suunnittelupainotteisia kymmenen opintopisteen (tai enemmän) arvoisia arkkitehtiopiskelijoiden kursseja. Suunnittelupainotteisia kursseja ovat tässä sellaiset kurssit, jotka olennaisissa määrin edellyttävät mitä tahansa arkkitehdin työhön liittyvää suunnittelua.

1. Vastaajan taustatiedot

Sukupuoli: mies / nainen / muu / en halua vastata

Ikä: ..... / en halua vastata

Opiskeluvuosia takana: .....

Kandidaatintutkinto suoritettu: kyllä / ei

Kuinka monta maisterivaiheen studiokurssia olet suorittanut? .....

Kuinka moni näistä kursseista ovat olleet suunnittelupainotteisia? .....

2. Arvioi yleisesti kuinka usein seuraavia arvostelumenetelmiä on käytetty kursseilla

	Ei koskaan				Puolilla kursseista						Aina	En osaa sanoa
Loppukritiikki	0	1	2	3	4	5	6	7	8	9	10	-
Loppuarvosana	0	1	2	3	4	5	6	7	8	9	10	-
3-5 osa-arvosanaa	0	1	2	3	4	5	6	7	8	9	10	-
3-5 osa-arvosanaa ja / tai lyhyt kirjallinen arvostelu	0	1	2	3	4	5	6	7	8	9	10	-
Yli 5 osa-arvosanaa ja / tai yksityiskohtainen kirjallinen arvostelu	0	1	2	3	4	5	6	7	8	9	10	-

3. Arvioi yleisesti tyytyväisyytesi kurssien arvostelun seuraaviin osa-alueisiin

	Erittäin tyytymätön										Erittäin tyytyväinen	En osaa sanoa
Arvostelun selkeys	0	1	2	3	4	5	6	7	8	9	10	-
Oikeudenmukaisuus	0	1	2	3	4	5	6	7	8	9	10	-
Tarkkuustaso	0	1	2	3	4	5	6	7	8	9	10	-
Tasapuolisuus	0	1	2	3	4	5	6	7	8	9	10	-
Avoimuus	0	1	2	3	4	5	6	7	8	9	10	-
Johdonmukaisuus	0	1	2	3	4	5	6	7	8	9	10	-
Tarkistettavuus	0	1	2	3	4	5	6	7	8	9	10	-
Kehittävyys	0	1	2	3	4	5	6	7	8	9	10	-
Luotettavuus	0	1	2	3	4	5	6	7	8	9	10	-
Arvostelu kokonaisuutena	0	1	2	3	4	5	6	7	8	9	10	-

4. Arvioi missä määrin seuraavat väittämät pitävät paikkansa

	Täysin eri mieltä										Täysin samaa mieltä	En osaa sanoa
Arvosanani ovat olleet oikeudenmukaisia	0	1	2	3	4	5	6	7	8	9	10	-
Osaan arvata arvosanani etukäteen	0	1	2	3	4	5	6	7	8	9	10	-
Kurssien arvostelu-perusteet ovat selvät	0	1	2	3	4	5	6	7	8	9	10	-
Tiedän missä kulkee hyvän työn raja	0	1	2	3	4	5	6	7	8	9	10	-

5. Arvioi arvostelua tai kursseja yleisesti valitsemalla sopiva vaihtoehto vastakohtaparien väliltä

													En osaa sanoa
Arvostelu on lannistanut minua	0	1	2	3	4	5	6	7	8	9	10	Arvostelu on motivoinut minua	-
Arvostelu on hämmentänyt minua	0	1	2	3	4	5	6	7	8	9	10	Arvostelu on selkeyttänyt minulle asioita	-
Kurssit ovat vieneet jaksamiseni opiskella	0	1	2	3	4	5	6	7	8	9	10	Kurssit eivät ole vähentäneet jaksamistani opiskella	-
Minua on painostettu mukautumaan tiettyyn muottiin	0	1	2	3	4	5	6	7	8	9	10	Minua on tuettu kasvamaan omanlaisekseni suunnittelijaksi	-

6. Mitkä seuraavista ilmaisuista kuvaavat kokemuksiasi kursseista ja niiden arvostelusta parhaiten? Merkitse rastilla kaikki, jotka mielestäsi pätevät.

- ○ Arvosteluperusteita ei juuri ikinä kerrota etukäteen kursseilla
- ○ Koen pätevän arvostelun tärkeäksi opiskelumotivaationi kannalta
- ○ Yleisesti minulla ei ole ollut arvostelusta huomautettavaa
- ○ Stressaan arvostelua, koska ikinä ei tiedä mitä sieltä tulee
- ○ Luotan opettajieni olevan oikeudenmukaisia arvostelussa
- ○ Olen hetkellisesti menettänyt opiskelumotivaationi arvostelun saatuani
- ○ En usko, että nykyistä arvostelu-mallia voi kovinkaan paljoa enää parantaa
- ○ Olen aina ollut tyytyväinen arvosteluun
- ○ Arvostelu on joskus lannistanut minut
- ○ Olen joskus itkenyt arvostelun takia
- ○ Arvostelulla ei ole minulle juuri väliä
- ○ Kritiikkitilaisuudet hermostuttavat minua
- ○ Huono arvosana on jäänyt kalvamaan minua
- ○ Olen pyytänyt tarkistuksen arvosanastani jälkeenpäin
- ○ Arvosanaani on korotettu pyydettyäni tarkistuksen
- ○ Arvosteluperusteet kursseilla ovat pääasiassa epämääräiset
- ○ Kokemukseni kritiikeistä ovat olleet pääasiassa hyvät
- ○ Olen joskus saanut selvästi odotettua paremman arvosanan
- ○ Minua on joskus arvosteltu hyvinkin epäoikeudenmukaisesti
- ○ Olen usein kokenut olevani hieman hukassa kritiikkien jälkeen
- ○ Osaan yleensä ennakoida hyvin kurssien työmäärän
- ○ Suhtaudun loppuarvosanan saamiseen usein pelonsekaisin tuntein

Kysely arkkitehtisuunnittelun studiokurssien arvostelusta – kysymysten selvennyksiä

Kohta 1: Vastaajan taustatiedot

Kysely on anonyymi. Vastaajan taustatietoja tiedustellaan vastausten tilastollista käsittelyä varten.

Kohta 2: Eri arvostelumenetelmien selvennykset

Loppukritiikki: Opiskelijat esittelevät työnsä koko luokan ja arvosteluraadin edessä kurssin lopuksi. Arvosteluraati arvostelee työtä suullisesti tämän jälkeen.
Loppuarvosana: Opiskelijat saavat yhden kokonaisarvosanan kurssista skaalalla 1-5.
3-5 osa-arvosanaa: Loppuarvosanan lisäksi opiskelijat saavat 3-5 osa-arvosanaa, jotka arvioivat työn eri puolia ja perustelevat loppuarvosanaa.
3-5 osa-arvosanaa ja / tai lyhyt kirjallinen arvostelu: Osa-arvosanojen lisäksi arvostelua perustellaan kirjallisesti muutamilla lyhyillä lauseilla osa-arvosanaa kohden. Vaihtoehtoisesti koko työtä arvostellaan muutamilla lauseilla kirjallisesti ilman osa-arvosanoja.
Yli 5 osa-arvosanaa ja / tai yksityiskohtainen kirjallinen arvostelu: Osa-arvosanoja annetaan monista työn eri osa-alueista. Tämä lisäksi arvostelua perustellaan lyhyillä lauseilla osa-arvosanaa kohden. Vaihtoehtoisesti koko työtä arvostellaan yksityiskohtaisesti kirjallisesti ilman osa-arvosanoja.

Kohta 3: Arvostelun osa-alueiden selvennykset

Arvostelun selkeys "Onko arvostelu ollut sinusta selkeää?"
Oikeudenmukaisuus "Onko arvostelu ollut sinusta oikeudenmukaista?"
Tarkkuustaso "Oletko ollut tyytyväinen siihen kuinka tarkkaa arvostelu on ollut?"
Tasapuolisuus "Onko arvostelu ollut sinusta tasapuolista eri opiskelijoille?"
Avoimuus "Onko arvosteluperusteiden soveltamisesta oltu avoimia?"
Johdonmukaisuus "Onko arvostelu ollut johdonmukaista eri töiden arvostelua vertaillessa?"
Tarkistettavuus "Onko arvosteluperusteiden soveltamista pystynyt tarkistamaan hyvin jälkeenpäin?"
Kehittävyys "Onko arvostelu ollut itseäsi kehittävää?"
Luotettavuus "Oletko kyennyt luottamaan siihen, että saat asiallisen arvostelun?"
Arvostelu kokonaisuutena "Oletko ollut tyytyväinen arvosteluun yleisesti?"

Kohta 4: Väittämien selvennykset

Arvosanani ovat olleet oikeudenmukaisia: Olet kokenut saaneesi oikeudenmukaisen arvosanan joka kurssilla.
Osaan arvata arvosanani etukäteen: Osaat itse arvioida minkä arvosanan tulet saamaan etukäteen.
Kurssien arvosteluperusteet ovat selvät: Tiedät tarkasti minkä perusteella työsi tullaan arvostelemaan.
Tiedän missä kulkee hyvän työn raja: Tiedät missä vaiheessa työsi on niin hyvä, että saat varmasti vähintään itseäsi tyydyttävän arvosanan.

Kohta 5: Vastakohtaparien selvennykset

Arvostelu on lannistanut minua/ Arvostelu on motivoinut minua: Millainen vaikutus arvostelulla on ollut sinuun tässä suhteessa?
Arvostelu on hämmentänyt minua/ Arvostelu on selkeyttänyt minulle asioita: Onko arvostelu ollut hämmentävää vai selkeyttävää?
Kurssit ovat vieneet jaksamiseni opiskella / Kurssit eivät ole vähentäneet jaksamistani opiskella: Millainen vaikutus kursseilla on ollut yleiseen opiskelujaksamiseesi?
Minua on painostettu mukautumaan tiettyyn muottiin/ Minua on tuettu kasvamaan omanlaisekseni suunnittelijaksi: Miltä opetus ja ohjaus kursseilla on tuntunut tässä suhteessa?

Kohta 6: Ilmaisujen rastittaminen

Merkitse rastilla kaikki ilmaisut, jotka mielestäsi pätevät. Voit myös rastittaa kaksi sellaista ilmaisua, jotka ovat osin toistensa vastakohtia, jos molemmat sinusta pätevät.

Haluatko antaa palautetta/ kommentoida kyselyä joltain osin? (voit jatkaa paperin selkäpuolelle)

Legend
DK = Don't know (choice)
- = did not choose anything

			2.					3.							
		Respondent	Final rev.	Final grade	3-5 suppl.	3-5 suppl. +	Over 5 + /	Clarity	Fairness	Specificity	Impartiality	Transparency	Consistency	Verifiability	Constructiv.
Survey 1	Finnish students	1	10	10	0	0	0	5	5	1	4	4	4	3	3
		2	6	9	DK	DK	DK	4	5	4	7	6	6	DK	5
		3	10	10	0	0	0	3	4	1	7	3	1	4	1
		4	8	9	2	2	0	7	7	8	7	8	8	7	7
		5	8	10	0	0	0	0	3	3	3	3	3	4	5
		6	7	6	2	2	2	7	7	5	7	6	6	5	8
		7	7	7	6	7	6	7	6	6	7	6	-	-	7
		8	10	10	DK	DK	DK	4	5	5	6	3	5	3	8
		9	10	10	-	-	-	8	9	6	7	8	9	9	9
Survey 2	Finnish students	10	10	10	0	0	0	3	7	5	7	5	7	4	5
		11	10	10	10	10	0	5	7	3	3	3	2	2	7
		12	10	10	0	3	0	3	DK	5	DK	4	3	2	7
Survey 3	Finnish students	13	5	10	3	0	0	6	6	4	7	3	5	4	2
		14	10	-	1	0	0	5	7	3	7	6	5	4	7
		15	10	10	0	0	2	6	6	6	8	3	8	2	8
		16	10	10	0	0	0	5	7	5	7	6	5	4	6
		17	5	10	0	0	0	4	8	2	DK	1	DK	1	6
		18	10	7	1	2	0	6	6	5	6	4	5	6	6
		19	10	10	0	0	-	7	9	7	9	9	7	4	7
Survey 4	Finnish students	20	5	10	0	10	0	7	8	7	8	5	5	-	7
Survey 5	Finnish students	21	10	10	10	0	0	7	5	5	4	9	8	DK	5
		22	10	10	7	4	1	9	8	8	8	9	7	7	6
		23	10	10	0	0	0	4	6	5	4	5	6	5	5
		24	10	10	1	0	0	3	5	3	5	6	7	3	5
		25	10	10	5	0	0	4	3	4	2	4	3	0	-
		26	10	8	2	2	0	6	8	DK	DK	6	7	2	6
		27	10	10	3	3	3	3	3	3	3	3	3	3	3
		28	10	10	6	2	2	7	8	6	8	7	6	6	7
		29	10	10	5	0	0	5	8	7	6	8	5	3	6
		30	10	10	0	0	0	6	8	6	8	8	6	8	7
		31	10	10	10	3	0	4	4	3	2	4	4	3	2
		32	10	10	5	0	0	7	7	6	7	7	6	5	7
		33	10	10	0	0	0	4	6	4	5	5	4	2	6
	Column average:		9,12	9,56	2,63	1,67	0,55	5,18	6,28	4,72	5,97	5,36	5,35	3,97	5,81
Survey 2	Exchange students	e1	8	9	7	5	8	8	8	6	8	7	7	7	7
		e2	8	8	DK	DK	DK	7	7	8	6	7	8	7	6
		e3	8	10	DK	DK	DK	9	DK	DK	9	8	9	DK	8
		e4	-	9	-	-	-	3	6	10	4	7	5	7	6
		e5	10	10	DK	DK	DK	7	10	8	10	5	8	9	9
		e6	10	10	DK	DK	DK	5	6	6	6	9	5	6	6
		e7	10	10	0	0	0	8	8	7	6	8	8	7	9
		e8	10	10	0	0	0	4	8	3	6	8	6	8	4
		e9	10	10	0	0	0	7	6	8	6	7	7	8	7
		e10	10	10	10	-	0	5	10	5	5	5	5	5	5
		e11	10	10	10	0	0	7	7	8	7	7	7	7	6
		e12	DK	DK	DK	DK	DK	5	9	10	5	3	5	5	9
		e13	10	10	DK	DK	DK	7	5	7	5	5	9	7	8
		e14	10	10	10	8	6	9	9	8	8	8	8	8	8
		e15	10	9	5	5	2	9	8	7	9	8	9	7	8
		e16	5	4	4	4	7	6	9	8	10	10	8	8	10
		e17	8	9	6	3	0	6	7	6	3	3	6	6	9
		e18	-	10	-	-	-	8	10	8	10	10	10	8	8
		e19	5	5	5	5	5	6	8	8	8	10	8	8	8
		e20	10	10	DK	DK	DK	6	9	7	9	4	5	6	7
Survey 3	Exchange students	e21	10	10	5	DK	DK	7	7	9	DK	6	9	9	9
		e22	10	10	0	0	0	6	9	7	DK	9	8	8	7
Survey 4	Exchange students	e23	10	10	0	0	0	3	7	3	8	8	6	5	6
		e24	3	9	3	3	3	5	7	8	9	9	9	8	8
		e25	10	10	0	0	0	8	10	6	6	10	10	10	8
		e26	10	10	0	0	0	6	DK	8	DK	10	DK	DK	10
		e27	9	9	9	0	0	1	4	1	3	2	2	-	3
		e28	10	10	0	0	0	5	8	6	10	9	6	9	6
		e29	10	10	6	5	1	7	6	7	7	8	6	5	5
		e30	10	10	0	0	0	7	8	7	7	7	8	7	7
	Column average:		9,04	9,34	3,81	2,00	1,60	6,23	7,71	6,90	7,04	7,23	7,14	7,22	7,23

| | | | 4. | | | | | 5. | | | | 6. | | | | | | |

Phone interview about design studio course evaluation

Study description: This interview concerns all design-focused courses for architecture students that are worth at least ten credits.

The study aims to examine the effects that good and bad evaluation methods have on the students and on university teaching. One of the goals of the study is also to find out what good evaluation is like and how the evaluation of students on the courses can be developed.

The aim of this interview is to find out the teachers' own views and opinions on the evaluation of students on the courses.

Participation in the interview is voluntary.

Handling: The answers collected through the interview are handled anonymously. Pertinent parts of the interviews are compiled into one chapter representing the teachers' views on the subject.

The interview will be recorded and parts of it will be transcribed for the chapter. The recordings will be deleted one month after the thesis has been evaluated.

Duration: Reserve 15 minutes for the interview. The time for the call will be agreed on separately.

Answering instructions: The interview will be conducted in a discursive manner and the interviewer may ask further clarifying questions. You may also challenge the questioning in addition to responding directly to the issue in question.

You can familiarize yourself with the below questions (7) beforehand:

Questions:

1. On how many design studio courses have you participated as a tutor or teacher (estimate)?
2. What kind of pedagogic training have you received?
3. Describe, in general, what you think a good model of evaluation is like.
4. How do you conduct evaluation of students on design studio courses led/instructed by yourself and why?
5. On what basis do you conduct the evaluation in this way?
6. Does the model of evaluation that you conduct on your design studio courses fulfill the qualities of a good model of evaluation?
7. What are the three most demanding things when evaluating student performances on design studio courses and why?

Puhelinhaastattelu arkkitehtisuunnittelun studiokurssien arvostelusta

Tutkimuksen kuvaus: Haastattelu koskettaa kaikkia suunnittelupainotteisia kymmenen opintopisteen (tai enemmän) arvoisia arkkitehtiopiskelijoiden kursseja.

Tutkimuksen tavoitteena on tutkia kurssien hyvän ja huonon arvostelun seurauksia sekä vaikutuksia opiskelijoihin ja opetukseen yliopistoissa. Lisäksi tavoitteena on selvittää, millainen on hyvä arvostelu ja miten arvostelua kursseilla on mahdollista kehittää.

Haastattelun tavoitteena on selvittää opettajien omia näkemyksiä ja mielipiteitä kursseilla toteutettavasta arvostelusta.

Osallistuminen haastatteluun on vapaaehtoista. Tutkielma kirjoitetaan englannin kielellä.

Käsittely: Haastatteluiden kautta saadut vastaukset käsitellään anonyymisti. Kaikista vastauksista kootaan otos edustamaan opettajien suhtautumista aiheeseen.

Haastattelu nauhoitetaan ja siitä litteroidaan osioita koosteeseen. Litteroidut osuudet käännetään englanniksi tutkimukseen. Nauhoitukset tuhotaan kuukauden päästä diplomityön arvostelusta.

Kesto: Varaa n. 15 minuuttia haastattelulle. Haastattelun ajankohta sovitaan erikseen.

Vastausohjeet: Haastattelu suoritetaan keskustelumuotoisesti ja haastattelija saattaa kysyä muita tarkentavia kysymyksiä. Voit myös problematisoida kysymyksiä sen lisäksi, että vastaat suoraan kysymyksessä esitettyyn asiaan.

Voit tutustua kysymyksiin (7kpl) etukäteen alta:

Kysymykset:

1. Kuinka monta arkkitehtisuunnittelun studiokurssia olet ollut mukana vetämässä ohjaajana tai opettajana (arvio)?
   On how many design studio courses have you participated as tutor or teacher (estimate)?
2. Millaista pedagogista koulutusta olet saanut?
   What kind of pedagogic training have you received?
3. Kuvaile millainen on mielestäsi hyvä arvostelukäytäntö yleisesti.
   Describe, in general, what you think a good model of evaluation is like.
4. Millä tavalla suoritatte itse yleensä arvostelun johtamillasi/ohjaamillasi studiokursseilla?
   How do you conduct evaluation on design studio courses led/instructed by yourself and why?
5. Mihin perustuen suoritatte arvostelun tällä tavalla?
   On what basis do you conduct the evaluation in this way
6. Toteutuuko kuvailemasi hyvä arvostelukäytäntö johtamillasi/ohjaamillasi arkkitehtisuunnittelun studiokursseilla?
   Does the model of evaluation that you conduct on your design studio courses fulfil the qualities of a good model of evaluation?
7. Mitkä ovat kolme haastavinta asiaa opiskelijasuoritusten arvioinnissa arkkitehtisuunnittelun studiokursseilla ja miksi?
   What are the three most demanding things when evaluating student performances on design studio courses and why?